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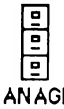
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The Australian Apple Review

Vol 2 No 9 December 1985

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Contents

Editorial

THIS IS THE last issue of the year 1985 which has been, without a doubt, one of the most exciting in the short and eventful history of the Apple company. It is absolutely pointless to dwell on the past and rake over the story of what will eventually be known as the Jobs trauma.

It is over and done with and we prefer to see that sort of melodrama kept on television where it belongs.

The end result of all this turmoil and nonsense is Apple goes into the new year a stronger, more vital and better organised company than ever before.

The Apple II has been given a new lease of life with the addition of extra memory capability, new disk drives and new, and quite amazing, peripherals.

The Macintosh has moved from being a cult machine to one set firmly in the mainstream of the business world where it is becoming the machine of choice for many senior executives.

True, the IIc has still not quite hit its stride but we consider it one of the best Apples in concept, design and execution and we believe strongly in its future. There are a few improvements we would like to see - what computer is perfect? - but we believe there is a huge market for the IIc which is as yet untapped.

In January we will have the stockholders meeting at which Apple will announce another bunch of goodies to the assembled glitterati and adorati.

We can make as shrewd a guess as anyone and say that the betting is we will see a new body for the Apple II with a detachable keyboard which will allow it to be used in offices in Europe. There, fixed keyboards are a no no.

We guess we will also see the new 800K disk drives, presently available on the IIe, made an integral part of the Macintosh. And we may well see the Mac CPU upgraded from the Motorola 68000 to the true 32 bit 68020 which also allows parallel processing.

Our crystal ball tells us we are also going to see video out on the Mac and, possibly, a colour monitor but not a built in colour screen.

Finally, there will be some interesting new developments for the LaserWriter which will use some of that immense 2.5 megabyte memory.

This past year was dramatic. Next year will, we trust, be a little less dramatic but just as exciting.

1986 will indeed be the year Apple starts to fulfill its true potential.

Bits and Bytes

Apple cautions third-party upgrade users

Apple Computer Australia has warned users of the 512K Macintosh personal computer that the hand-soldering processes used in many non-Apple memory upgrades can jeopardise the integrity of the Macintosh system.

Apple has advised that such equipment may lose eligibility for service through authorised service outlets.

According to Apple technical manager, Mr. Greg Buchanan, some "homebrew" upgrades for increased memory, composite video parts and hard disk drives can permanently damage the multilayered circuit boards and surface mounted devices installed within the computer.

"It is important for users to note that Apple has always honoured a policy of allowing continuing upgrades to existing equipment when enhancements are released," Mr. Buchanan said, "but we cannot guarantee that any modified systems will work with upcoming hardware and software."

Apple has confirmed that the standard limited warranty accompanying new Macintosh equipment is voided by non-Apple upgrades, that modified computers are not eligible for the Apple Care Carry In Service programme, and that modified circuit boards are ineligible for the Apple exchange module programme.

Australia gets the guernsey

Apple Computer Australia has taken the prestigious Apple Computer Inc. International Founders Award for attaining the most extraordinary sales growth of any Apple subsidiary.

Named for Mike Markkula - the US computer industry entrepreneur who was one of the three people instrumental in establishing Apple in 1976 - the Founders Award is presented to the country achieving the greatest growth over target in one year.

In the financial year ended 30 September, 1985, Apple Computer Australia achieved 152% revenue growth and 123% unit growth over the previous year, winning the award by a narrow margin from Apple France.

During the presentation at the recent Apple International Conference in San Diego, California, an achievement recognition award was made to Apple Computer Australia's director of sales and marketing, Denis Bignold, who joined the company in late 1984.

The monster Apple

Thinking Systems of Stanmore in New South Wales import good gear for the Apple range. Recently they imported a board to give CP/M to the Apple IIc which we tested and reviewed. It works and works very well.

Now they are bringing in a one megabyte memory board for the Apple IIe which fits in any slot and is accessible from AppleWorks. Plainly this is in direct competition to the newly announced Apple one megabyte board and we look forward to doing a comparison review of both boards in the near future.

For the moment it is interesting to note that this new board - called 'The Flipper', only draws 300 ma of power. Now, as the power supply of the IIe is 2.5 A it is at least theoretically possible to use six boards at the same time without a supplementary power supply although we are not sure what that would do to the operation of the disk drive.

In our next issue we hope to have a full test of the only six megabyte Random Access Memory Apple IIe in captivity.

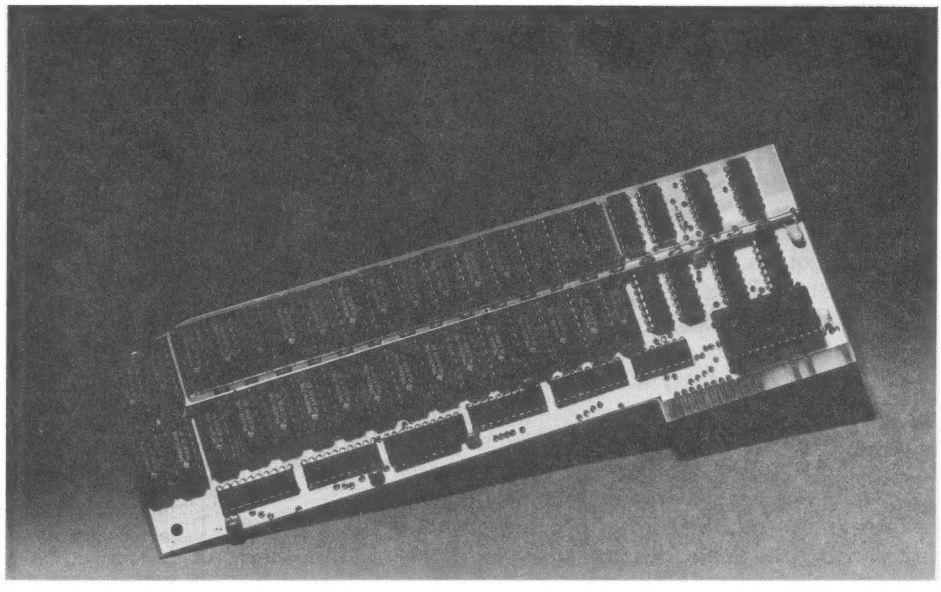
First cab off the rank

Microsoft have sent us a press release saying that it is believed the preparation of the annual report for Expo Oil on an Apple Macintosh and a laser printer was a world first.

No it isn't. Not by a damn long chalk.

We are willing now to put in the claim for Paget Mining for the Australia record because their annual report was prepared on our Macintosh and our LaserWriter, lo, these many months ago. And for the world title we would put forward Sheikh Abas of Bandar Seri

One Flipper card with one megabyte of memory ready for insertion.



Christmas Apple

In the full spirit of Christmas, Apple Australia has done a lot of special bundling of bargains at special prices.

It is taking the Apple IIe and IIc and for the normal recommended retail price is bundling in programs and peripherals exceeding $550 in value.

With the IIc you get the AppleMouse II and Mousepaint graphics program, MasterType's *Writer* wordprocessing program, the magazine on a disk, *Microzine*, and *Hitchhikers Guide to the Galaxy.* Plus the Human Edge program *Mind over Minors* which teaches you how to cope with ankle biters and is fairly controversial.

The IIe is being bundled with the new UniDisk drive which gives you a whopping 800K of memory on each 3.5" disk. Also thrown in is AppleWorks, the three in one program, *Typequick* and *Microzine.* Plus a book of vouchers whichgets you 20% off certain software packages.

All of this information comes frim the young and lovely Inge Fuglestved of Apple who adds a personal Norwegian "Ho, ho, ho" for all our readers.

Strange logic

This magazine sometimes receives some strange telephone calls. Recently we were called by a man with a British accent who asked when were we going to publish a story about Apple taking iniquitous action against Australian schoolchildren by confiscating their computers just as they were about to sit for their examinations.

It took some quite persistent questioning to get the caller to admit that in fact Apple had not confiscated any computers from any schoolchildren either before, after or during an examination.

What he was complaining about was Apple continuing its campaign against the importers of fake Apples from Taiwan which, eventually, might have been sold to schoolchildren. Which is a different matter altogether.

For the record, Apple Australia are continuing legal action throughout Australia against vendors of fake Apples. The managing director of Apple, David Strong, has stated that amendments to Commonwealth copyright laws clearly protect the proprietary operating systems developed by Apple and other leading personal computer manufacturers, but some local importers and dealers of fake Apples - like our caller - have not got the message.

David Strong says, "Up to nine months notice in writing has been given to each vendor and we have never pursued enormous damages payments. We simply demand cessation of the activity, recovery of our costs and forfeiture of profits related to sales of fakes."

In recent months 14 cases have been settled before the High Court, another six cases are under way and another four dealers are under investigation.

The good news is if you have a fake Apple there is no likelihood of the Federal police coming and hammering on your door in the wee small hours of the morning. The bad news is if, on the other hand, you want your machine repaired, and you will, my oath you will, you may find your friendly fake dealer is no longer in business.

It truly is a case of caveat emptor, let the buyer beware.

From Seiko to Apple

Seiko are shortly to launch in Australia the RC1000 specially configured for the Apple IIe. This is a wristwatch which appears to contain an 8K memory into which information can be down and uploaded from the Apple.

As it stands at the moment it allows you 80 screen pages with 24 characters on each screen. These can be divided into 12 separate data files and each of the screens can then be tied back into the watch to beep and display its information at a preset time, up to one year away.

In that configuration, this peripheral is little more than a gimmick, but it has been reported in the Japanese trade press that Seiko have now managed to shoehorn a 256K chip into the watch and it is that model which will be launched in Australia. This will not, ofcourse, affect the size of the display screen but it will allow, according to our calculations, nearly 2,000 pages of information to be stored at one time, when the watch immediately moves from the gimmick mode into being a useful working tool.

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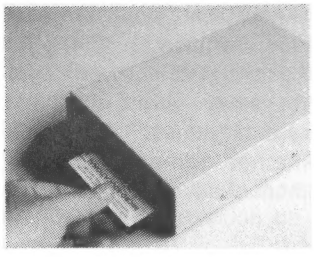

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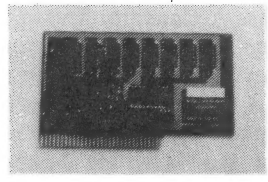

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Macintosh programs blast into orbit

Where, we ask, will it all end? The programs for the Macintosh come thick and fast. And they get better by the day. The latest collection we have got hold of have graphics so dazzling they leave every other computer in existence for dead. We dragged GARETH POWELL away from his Mac where he was happily playing submarine commanders and asked him to write about what is happening out there in the wide and wonderful world of Apple Macintosh programs.

NORMALY, WRITING for this august journal is a pleasure. This month it is a penance - because it is cutting in to my precious Mac time. Bear in mind that I have a living to earn writing about machines which are lesser breeds without the law. My hobby is my Macintosh and anything that cuts into the time available can not expect to meet with my whole hearted approval. Neverthess, anything for a quiet life.

Let us start with the program I like the least. This is *The Hitch-hikers Guide to the Galaxy.*

There is a cult following for this book which has assumed almost religious proportions. I did not enjoy the book - I prefer science fiction to fantasy - and as result the game, which as far as I can ascertain contains no graphics, moved my emotions not one jot.

Familiar scene

The first screen describing the dreadful bedroom in which our hero awakes precisely describes the state of my bedroom - and, indeed, the rest of the house. And waking up to be told this is going to be the worst day of my life is neither new nor particularly exciting.

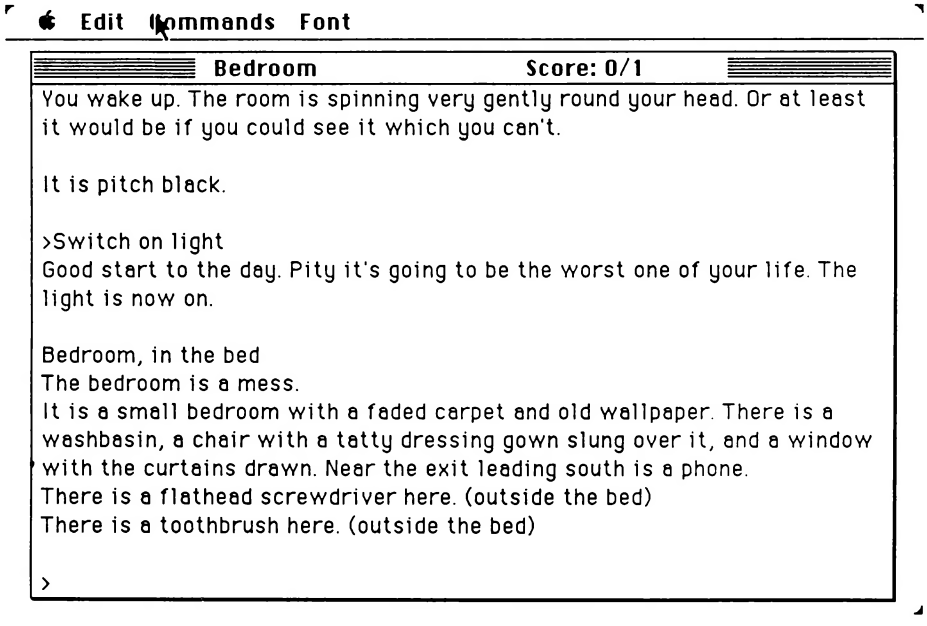
I pass on this one.

If you are into adventure games, and if you liked the book *Hitch-hiker's Guide to the Galaxy* you may well consider it the bee's knees. I, as you will have gathered, do not.

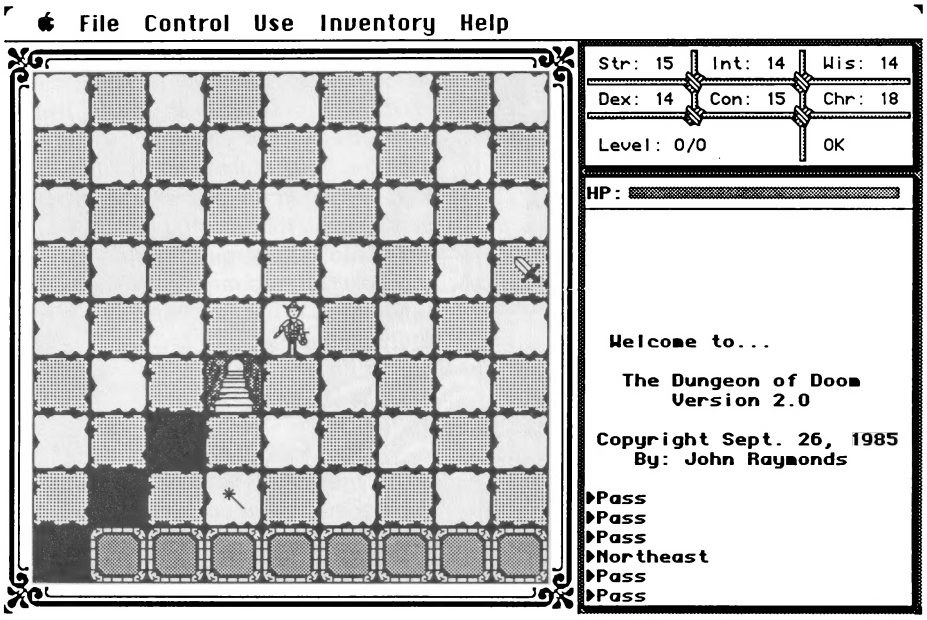
But then I have never enjoyed any of the so-called adventure games, possibly because I find the rules capricious, the lack of good, sharp and relevant graphics irritating and the intentions of the author, pretentious.

I know that there are thousands of games maniacs out there who totally - and possibly violently - disagree with me, I am sorry about that. I don't like adventure games.

Another game which has a strong element of adventure in it is *Dungeons of*



The first screen of Hitch-hiker. Note the description of the bedroom. I know it well.



You can see clearly the chess board type layout in the Dungeons of Doom.

Doom. But here it has been cleverly incorporated into a board game - not a million miles away from the idea of chess - to give the game visual impact and to allow the player to see the results of a move or a strategy immediately without just having to rely on an ill spelt, ill parsed and inelegantly written rejection on the screen.

I think the *Dungeons of Doom* leaves *Hitch-hiker* - and *Zork* and all its clones for that matter - for dead. It is still not a game I want to curl up with - but the fault lies in me, not in the design or the implementation of *The Dungeons of Doom.*

Landing a space shuttle

Challenger is something else again.

This is not unlike the famous *Flight Simulator* which has made 747 captains of us all. This time you have to bring the space shuttle Challenger safely to earth. The authors have gone out of their way to make the instrumentation and the situation as real as possible and obviously an immense amount of time and ingenuity has gone into the writing of this program.

For example, if you are interested how any part of the space craft - the first, truly navigable space craft - works, you have only to ask and a screen of well illustrated, concisely written documentation appears. If you play this game extensively you will certainly know more about the Challenger and its construction than the average person. The game makes the fullest use of the Macintosh and its tremendous graphic facilities and it would be difficult to fault the design and construction of the game except for the fact it does not make use of the sound capabilities of the Mac.

(Whether, in fact it would be possible or socially desirable to emulate the noise made by the Challenger with its engines at full thrust is another matter but there is no doubt that sound adds an extra dimension to all computer games.

Incompetent pilot

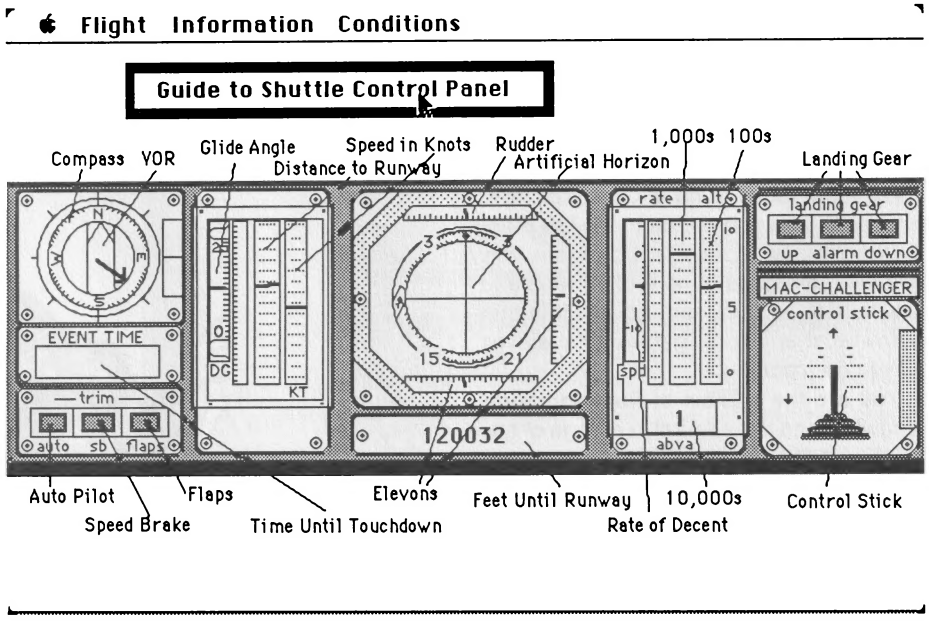
Challenger is not, however, for me. Neither, for the same reasons, is *Flight Simulator.* The cause is simple. I always crash early on in the piece.

Why, I know not.

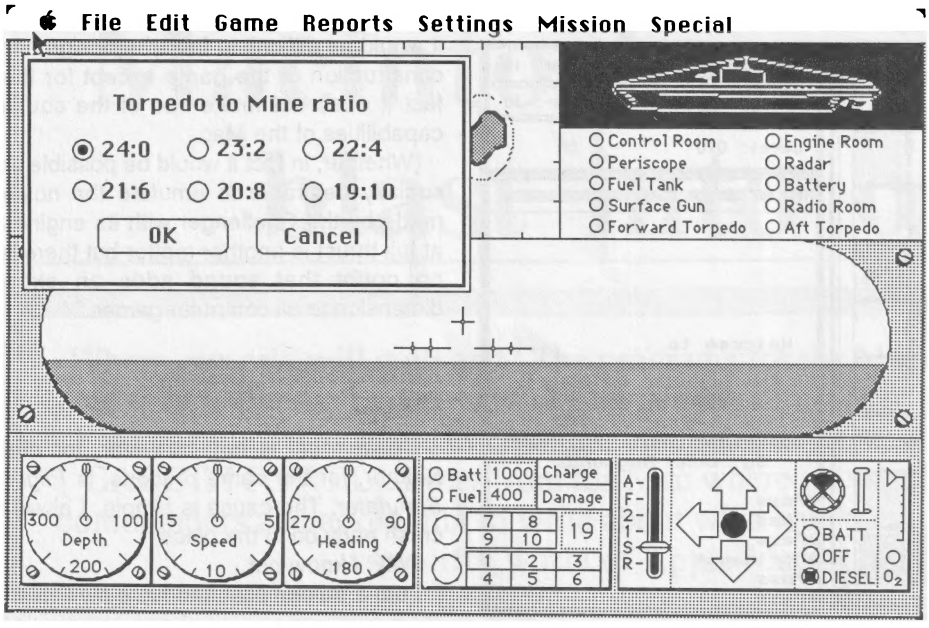
I am a trained pilot and have my Private Pilot's Licence. I know theory of aerodynamics and I am not unconversant with the controls involved in manipulating one of these craft. I have read the book of instructions with great care and I make wide use of the help screens.

But for the life of me I simply cannot get the damn thing to land without ploughing up the countryside and doing serious, indeed terminal, damage to the craft and myself.

I accept the fault is mine and that I



The sort of excellent advice the game gives you about instrumentation.



This is what you see as submarine commander of the Gato class Growler. Neat.

should not be let out on a bicycle without a keeper and training wheels. But if a game keeps consistently zapping me then I get bored.

Again, I will pass on this one although several of my friends fly the Challenger safely back from space missions time and time again, even after choosing to have half a gale blowing across the runway. It wonders me how they do it. As far as I am concerned this is white man's magic.

Down in the deep

Far more to my liking is *Gato.* This is a simulation of a submarine in the US navy during the war in the Pacific. Again, the authors have gone to no end of trouble to get the details right and the result is one of the most enjoyable games I have ever played on a computer.

You are the captain of the submarine "Growler" and the admiral in charge of the Pacific at the time (who I guess would have been "Bull" Halsey who had as his adminstrative assistant author James Michener who went on to write *Tales of the South Pacific)* keeps telling you to nicky poo off and sort out a few Japanese, pick up a crashed pilot or destroy a shipping convoy.

All the standard equipment and information is there for you to work with. You have radar, a periscope, the choice of running submerged under battery power or on the surface under diesel, torpedo tubes, mine launching abilities and a surface gun. You can also get regular reports from the radar - it sounds a blip to attract your attention when it make a sighting - the wireless room and various departments of the ship.

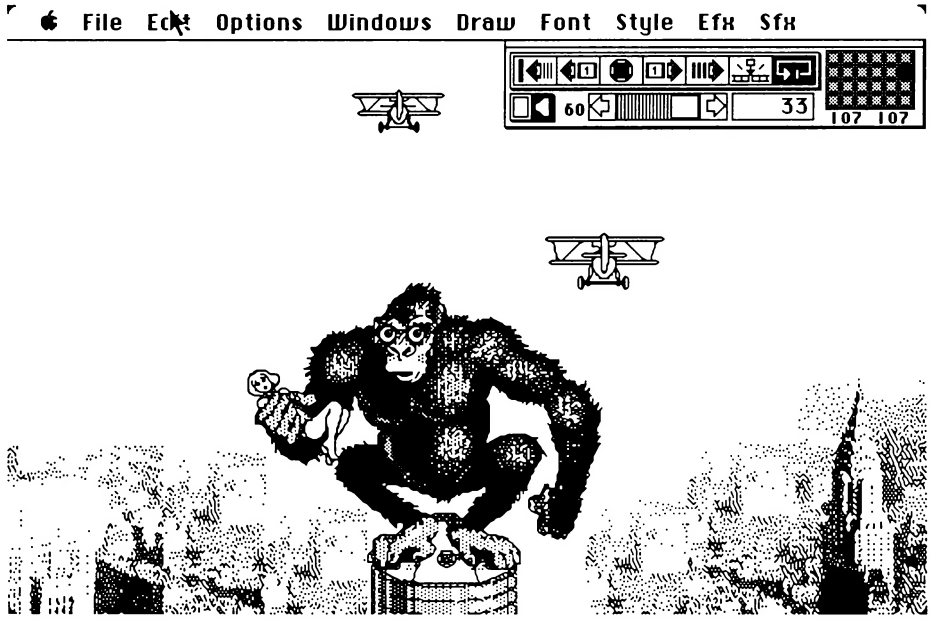
You are restricted in range by the amount of diesel you require and your batteries need recharging on the surface after prolonged running when submerged. Bear in mind this was the Pacific war and the Gato class submarines had no snorkels for recharging while running submerged. That invention came much later in the piece.

Crash dive

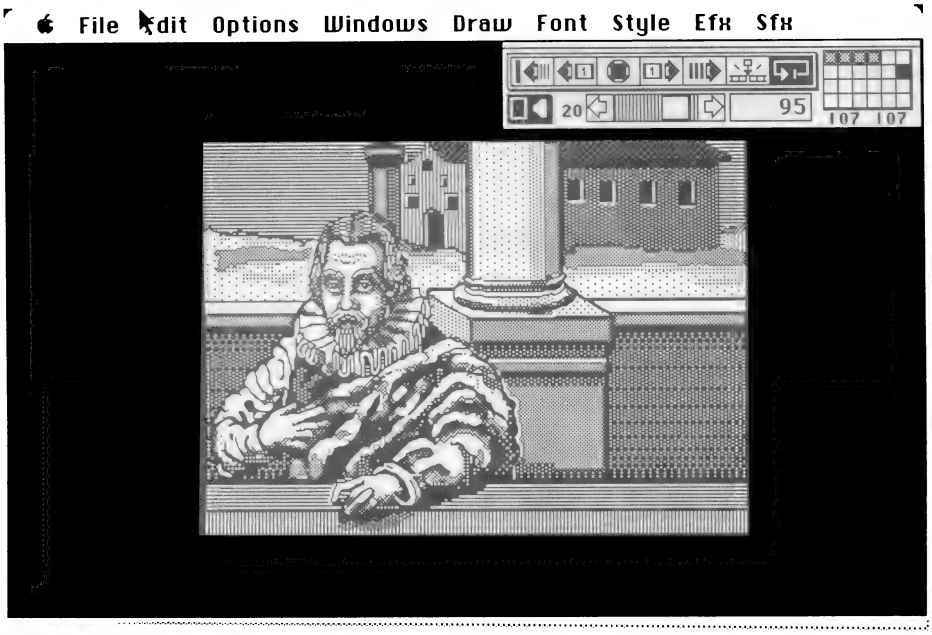
The first time I toddled off I sank my own submarine tender and then got in the way of the *Shinto Maru* which sent me to the bottom of the oggin before I had fired a torpedo.

Once I had got into the swing of the game I was able to sink ships left right and centre and dive deep enough and fast enough to get out of the way of the dreaded depth charges.

This is truly tremendous fun to play and teaches naval strategy in a simplistic, but still I think totally valid, way. If I had to make any changes to the program it would be to improve the sound effects which ain't bad but could be better. What program couldn't?



Misunderstood and unloved, King Kong faces his doom with a brave smile



The Bard looks pensively on, and drums his fingers and blinks his eyes. Lifelike.

It is silly to award points for games - so much depends on the tastes of the player - but as far as I am concerned there is only one other game that rivals this and that is *The Art of War* which is not yet, as far as I am aware, available on the Macintosh.

Command of the subject

The key to the success of this game is not the creators' undoubted talents as programmers. It is the fact they plainly know their subject - the Gato class of submarine - backwards, and they have gone to no end of trouble to impart that information to the player.

Gato represents a new generation of computer games. It is intelligent, amusing, educational and totally engrossing.

I had never thought of the Macintosh as a games machine before. With games like *Gato* I could be persuaded to change my mind.

Cartoon creator

It would be wrong to call *VideoWorks* a game. It is a designer's tool and an immensely powerful one at that. Nevertheless, if like me you are a perpetual infant, you can have an immense amount of fun playing with it.

I am told by the Mac-crazed William Bullock that it bears no resemblance to *StoryBoard* - and serves quite a different function. And who am I to argue? It just seems very similar although having used both extensively I concede that the purpose of both programs is quite different even though some of the results are very similar.

What would be a truly amazing program is if both *StoryBoard* and *VideoWorks* were combined together into one.

My guess is that you would run up against the wall of computer memory but if the two megabyte Macintosh eventuates then, with a hard disk, this would be perfectly feasible.

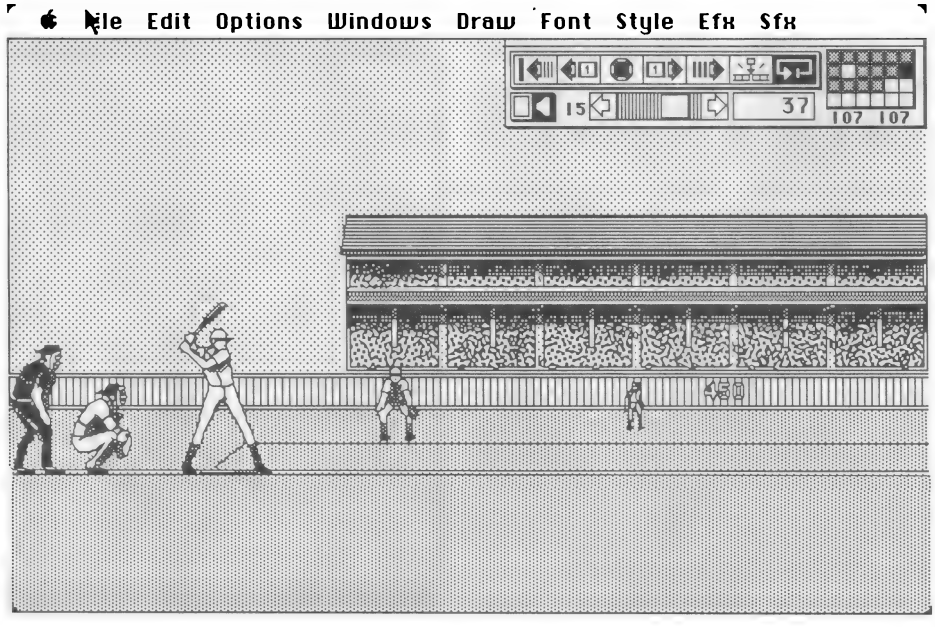
Basically the program allows you to make cartoons of a complexity of sound and movement that would have Walt Disney turning around in his deep frozen, cryogenic tomb where he awaits his second coming.

Animated parts

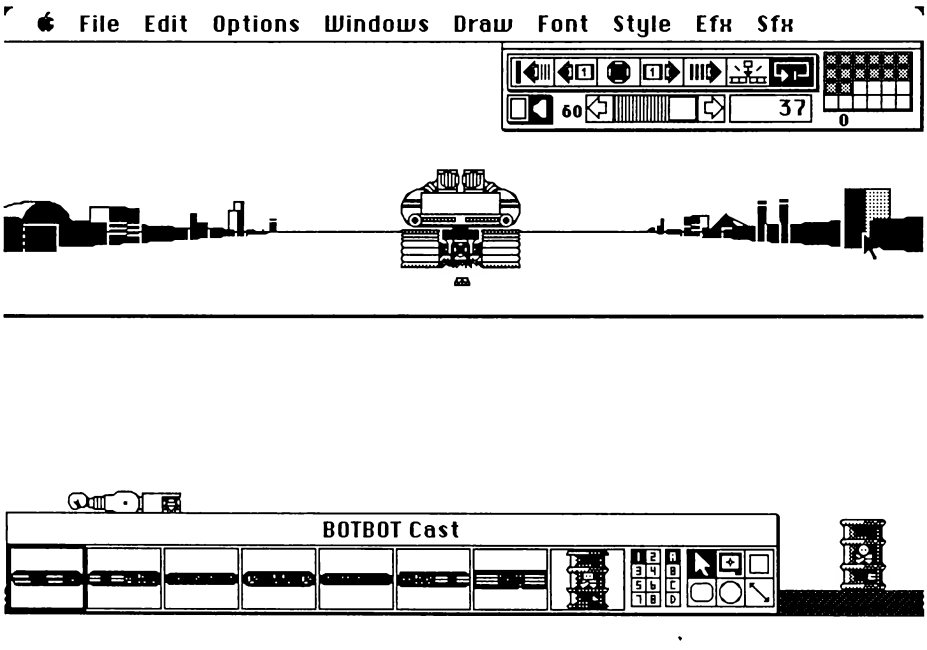
You can take an object and break it down into the parts that are going to be animated during the cartoon.

Let us take an example that comes with the program.

King Kong is on top of the Empire State Building with the lissome Fay Wray in his arms and assorted biplanes flying around and zapping him with machine guns. There are those of us who are old enough



Take me out to the ball game. This cartoon plays the music during the game.



Part of a science fiction cartoon using a robot. Pure Steven Spielberg.

remember this scene from the movie King Kong with extreme vividness.

When you break down the scene for cartoon purposes you find that the moving elements are, relatively, limited.

King Kong waves a fist with his spare arm, his mouth moves and his eyes roll as he snarls defiance. Miss Wray kicks her legs desperately as she struggles in the monsters grasp, three biplanes fly on predetermined circuits and fire in synchronised bursts. There may be more elements than this - but not many.

Each of these components - the program calls them characters - can be controlled and programmed in its movements and can be set to operate at a specified set of moments in a screen.

New cartoon method

In truth, this is not the way that cartoons are normally made but I can see an immense future for the program if the vital element of colour is added. Sound is already available and adds tremendously to the impact of the finished result.

Cartoons are not just designed to amuse.

They can be serious educational tools in their own right and their scope, if they are relatively cheap and easy to make and assemble, is almost unlimited.

VideoMaker has greatly expanded the possible uses of the Macintosh in education and business. It will probably be only a matter of months before we see cartoons produced by this ingenious and totally flexible program incorporated into other computer programs to give them an extra touch of versimilitude. It may even be used to improve the *Hitch-hikers Guide to the Galaxy.*

The point that has to be made is that if programs keep on improving at this rate the Macintosh is going to become and essential piece of the furniture in every advertising agency, in every film studio, in every education department and every television station.

True there are other computers on the way which, we are promised by the manufacturers will do all of these things - and will do them in colour.

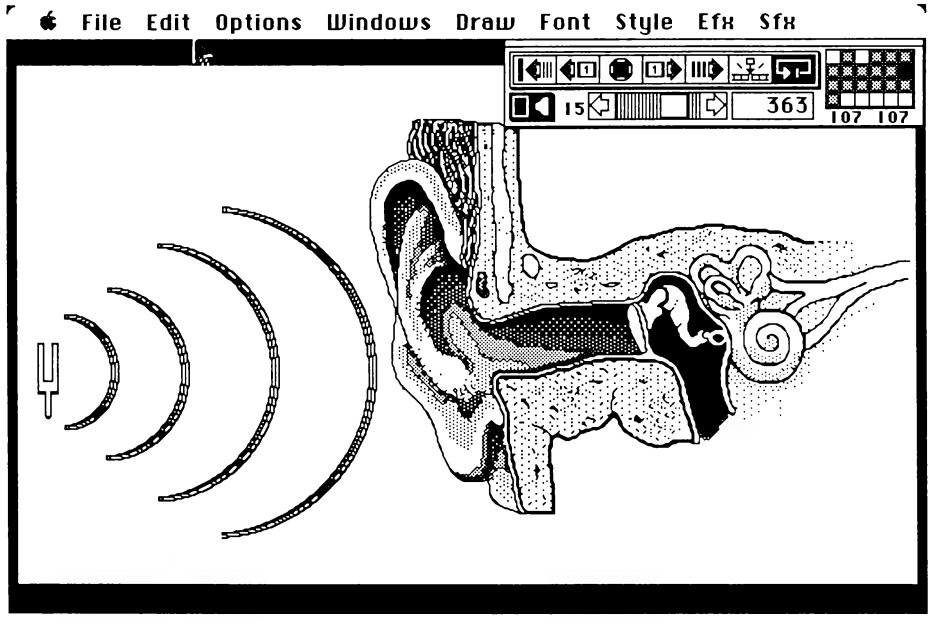
And they may well be right. But the Macintosh already has the capability of producing these programs.

Even if at the moment they are in the full glory of black and white. But all of these programs have a built in colour capability.

If Macintosh announces a colour monitor next year they will have killed the opposition before it gets out of bed.

Now, if you will excuse me, I am extremely busy because my submarine is in Quadrant 15, is running low on oxygen and battery power and is being depth charged by a persistent enemy who is circling overhead.

I really have not got time to sit around idly and chat when the fate of the war in the Pacific is in my hands.



An example of how the cartoon facility can be used in education.

At the terminal: *Accessing Viatel*

by Paul Zabrs

FROM THE TIME VIATEL came into existence on 28 February of this year, I have been getting inquiries about how to access it with an Apple II computer. Over the last several months I have been developing software to do just that and thus have become somewhat familiar with how it works at the technical and practical level. In this article I shall attempt to describe how an Apple II can be made to access VIATEL and similar services. Next month I shall concentrate on what they can provide.

VIATEL is one of an increasing number of services running under the VIDEOTEX system. VIDEOTEX differs from the standard method of computer communications in two major ways.

First, in addition to the normal character set, VIDEOTEX uses 64 graphic characters which if received by the usual communications software result in unintelligible garbage. A maximum 40 characters can appear on a single line, and there are 24 lines. The screen never scrolls, it is always cleared before a new one appears.

The second major difference involves the speed of communications. Normally information moves with the same speed, known as the baud rate, in both directions. Under VIDEOTEX the terminal receives at 1200 baud and sends at 75 baud, ie, 6x slower.

VIDEOTEX graphics can be emulated quite nicely by Apple Hi-res graphics. That means no hardware enhancement is necessary as far as the display goes.

Split baud rate

On the other hand the split baud rate presents a bit of a problem. It is necessary to use a 1200/75 baud modem. Of course all such modems can also be used for the standard 300 baud operations. But just an ordinary 300 baud modem won't do here.

Most communications cards for the Apple II cannot be set by switches for split baud rate operation. The only exception, to my knowledge, is the relatively rare Sercom card which can be set for 1200/75 baud operation. The disadvantage is in having to change the switch settings on the card every time 300 baud communications is used. But this card can be used directly with inexpensive modems for VIDEOTEX services.

The Apple modem operates at 1200 baud in both directions with the Apple, but steps down the rate to 75 baud for sending to the remote computer. That is nice, if you can afford the cost. Another possibility is to use a modem which requires the split baud rate from the Apple and insert a Baud Rate Converter between the computer and the modem. The disadvantage is cost and an extra piece of equipment.

Apple = Videotex terminal

Someone may ask if it would not be possible to regulate the baud rate by software, so that a modem for under $200 can be attached directly to the computer. This was, in fact, suggested to me a while ago. After a bit of work it turned out that, yes, it will work very nicely with the Super Serial Card or the Apple IIc. After a lot more work VIATERM, the program designed to convert an Apple II into a VIDEOTEX terminal was born.

Provided there is a Super Serial Card in slot 2, VIATERM will, of course, work with the Apple modem, but not only that, it will work identically on any Apple II including look-alikes and with any 1200/75 baud modem. The IIc does not need any interface card, all that's necessary is plug in the modem and boot up the program.

There are already several 1200/75 baud modems on the market, and some sell for below $200. Others cost a lot more. All are based on the same modem chip, the difference is mainly in extra features which some modems provide, not necessarily in performance or reliability.

All the newer modems are direct-connect, which means that you unplug your telephone and plug in the modem. All the cheaper modems have their own telephones, so that you can still make and receive calls normally. There is a switch on the modem, usually marked PHONE/MODEM, which allows the user to switch between the two.

The more expensive modems can AUTO-DIAL, ie you type the number on the keyboard and the modem dials it for you. But they seldom have a telephone attached. Such modems also have the AUTO-ANSWER ability, which is necessary if you are operating a bulletin board.

Avtek Mini Modem II

Lately I have been testing the soon to be released AVTEK MINI MODEM II (retail $199) mainly with VIATEL with excellent results. It is similar to the BEEMODEM, but even smaller and comes already equipped with the power supply, which the BEEMODEM does not. Both these modems perform more than adequately.

VIATERM will be released before the end of November and all the TERMINAPPLE purchasers who have sent in their registration card will be notified of this the same as they were about TERMINAPPLE II. VIATERM will be offered to them at a significantly reduced cost.

But what can databases do for me?

Databases are more misunderstood than almost any other aspect of personal computing. Here Gareth Powell sorts out what a database can do for you.

I'M ALL FOR AN EASY LIFE. And I get easily frightened by some of the more complex phrases in computers. For years I confused the idea of a database with *dBase II.*

The second is a program which has its own language, its own experts and a complete library of manuals on how to operate it. The first, the database, is a simple way of dealing with a long list of items or information. It can save you an immense amount of time and is, next to, perhaps, word-processing and spreadsheets, the best use to which you can put your Apple computer.

"I am not trying to recatalogue the universe, or even to keep control of a large warehouse of spare parts. All I am trying to do is to keep my private life in order."

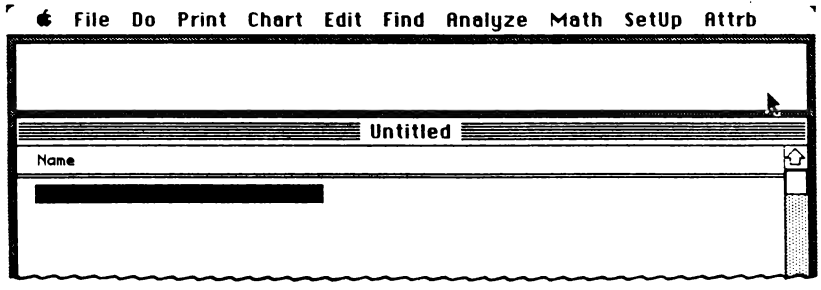
This is not the time to start discussing the differences between a true relational database and a file manager. At the simplistic level that I operate at, they are all databases.

I am not trying to recatalogue the universe, or even to keep control of a large warehouse of spare parts. All I am trying to do is to keep my private life in order.

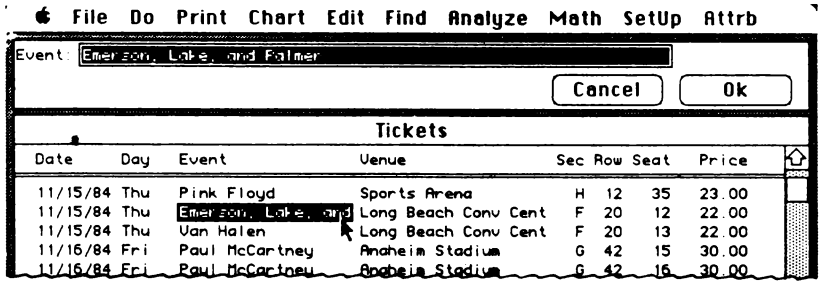
I have used a database on both the Apple II series and the Macintosh. And the first and most obvious is as an address book. In the United States it is very common for people to keep a device called a Rolodex in which they have the names, phone numbers and addresses of all their acquaintances with a few notes about their likes and dislikes neatly filed in alphabetical order. In fact, I have heard one American say to another "If you keep speaking to me like that I will take you out of my Rolodex". The ultimate threat.

I use one of my database programs precisely for that. In it I put names, addresses, companies, telephone numbers, job descriptions and a memory jogging phrase about everybody I need to do business with.

It started off as an entry of about 300 people. At the moment it's over ten times that much and still growing. My own guess is that almost everyone could fill a database with at least a thousand names and addresses without really trying. It doesn't matter if you only need to know those names and address once a year.



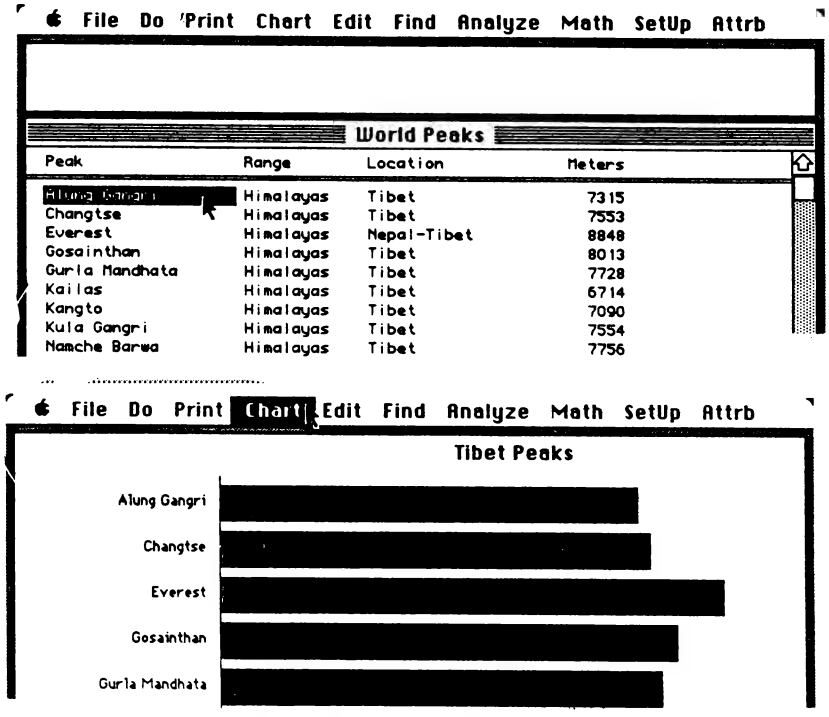
Remember, you may change the width of any column at any time—even if the column is already full of data.



Any data cell may contain up to 62 characters, no matter how wide the column display is in the Data Window.

Databases

- *can they help you sort out your life?*



Even if it's only at Christmas time. It's very comfy to know that you have got the information neatly stored on a disk.

But having entered the information, the one great strength of a database is that it can sort it in almost any way you like. You can sort it alphabetically, numerically, by telephone number, by country area, or even by the date you entered it.

When I first started using a database I put a telephone directory on. I found it was far more trouble than it was worth. It is much easier to write the telephone numbers into a little black book. But once I added job classification, areas of interest, addresses, reasons for contact, then I found out that the only way to go was with a proper database.

It's interesting to note that although I only use my database for social purposes, I am running out of space on my computer. I have been using it originally on my Apple and my database now runs to more than eight floppy disks. That is an awful lot of disk shuffling to do when I am using it. I'm thinking of transferring it all over to my Macintosh, where I am going to use a program called *Overvue*, but I think that I will almost certainly have to use a hard disk to get all the information I want on. It is a bit daft to think like this but I am slowly coming to the conviction that for the amount of use I get out of my machine a 20 Mb disk is almost essential.

Overvue appears to me to be the ideal sort of database for the casual user. It is unbelievably simple to use and yet at the same time can do sophisticated sorts extremely quickly. With a hard disk it becomes very quick indeed.

One area where I am only just starting to use the power of my database is in printing out names and addresses and using the names in a standard letter. To be truthful I cannot think of a standard letter I want to send to everybody I know, unless it is notice of my intending demise. But the facility is there.

"Almost everyone could fill a database with at least a thousand names and addresses without really trying"

I have used it on one occasion to write to everyone I know in the computer business to see if they were interested in me starting a computer newsletter. I very quickly found out the reply. No.

The second use that I am putting my database to is listing all the computer programs I have tested and my use of them.

The fact is that I use about six or seven new programs every week. It's getting to the stage that I can hardly remember what I have used, what I thought about it, and what I wrote about it. With the database I am able to set up what is effectively a very simple card filing system that gives me the name of the program as it was sold (and note that these names change with incredible rapidity), the distributor in Australia (that's another name change), the price (also a moveable feast), what I thought of the documentation and how many bugs I found in the program. And believe me one finds bugs in the programs all the time. The original version of *Overvue* had a nasty habit of losing data every now and again without letting me know. As I write about ten articles a week - most of them reviews - the database that I have built up of my writing and of the programs that I have tested has already filled up a five megabyte hard disk.

"Those databases are specifically designed to be used as the building blocks for making turnkey programs for major businesses."

I'm now seriously looking at using a 20 megabyte hard disk so that I can keep a complete track of all of the newspapers, articles and programs that I write for, write and test.

Despite the fact that I engender an immense amount of information, I still do not require the power of a more sophisticated database than *Overvue.*

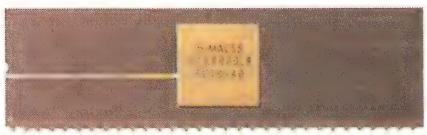
Those databases are specifically

What makes Macintosh tick. And talk.

The brain of the Apple Macintosh uses a blindingly fast 32-bit MC680000 microprocessor. Far more powerful than the 16-bit 8088 found in current generation computers.

The 16-bit 8088 microprocessor.

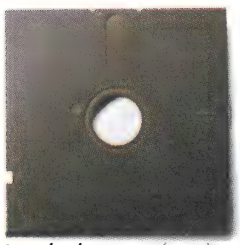
Macintosh's 32-bit MC68000 microprocessor.



The heart is a revolutionary technology of windows, icons, pull-down menus and mouse-commands.

Which makes the 32-bit power not only more useful but easier to learn.

Another miracle of miniaturisation is Macintosh's built-in 90mm (3½") microfloppy disk drive. Its 90mm disks store more than conventional 135mm (5¼") floppies – 400K. So while they are big enough to hold a desk-full of work, they are small enough to fit in a shirt pocket.



Standard 135mm (5¼") floppy disk.

Macintosh's 400K 90mm (3½") disk.

And, thanks to its size, if you can't bring the problem to a Macintosh, you can always bring a Macintosh to the problem. (Macintosh actually weighs less than 9 kilos.

Small footprint. Macintosh is ⅓ the size and volume of the IBM PC.

And speaking of talking, Macintosh has a built-in polyphonic sound generator capable of producing high-quality speech or music.

All it takes to get it talking is special Macintosh speech generating software.

On the back of the machine, you'll find built-in high speed RS232 and RS422 AppleTalk/serial communication ports. Which means you can connect printers, modems and other peripherals without adding $250 cards.

It also means that Macintosh is ready to hook into a local area network. (With the AppleTalk Personal Network, you'll be able to connect up to 32 computers and peripherals.)

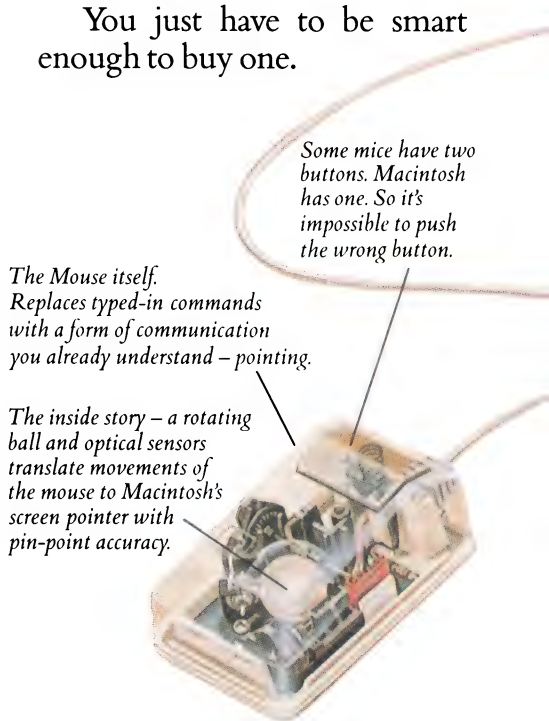
Should you wish to double Macintosh's storage with an external disk drive, you can do so without paying extra for a disk-controller card – that connector is built-in, too.

And, of course, there's a built-in connector for Macintosh's mouse, a feature that can cost up to $500 on computers that can't even run mouse-controlled software.

Of course, the real genius of Macintosh isn't its serial ports or its polyphonic sound generator.

The real genius is that you don't have to be a genius to use Macintosh.

You just have to be smart enough to buy one.



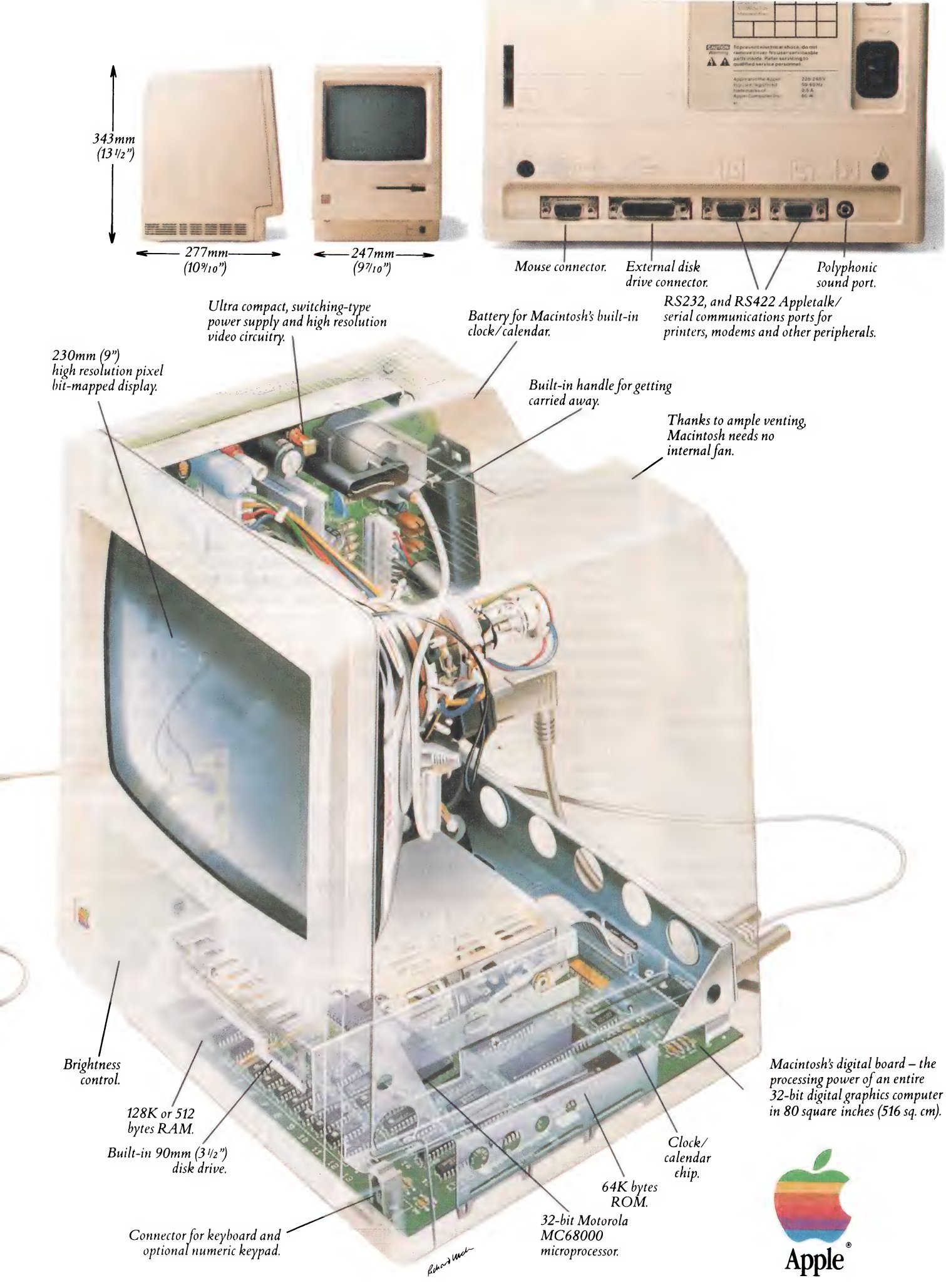
Some mice have two buttons. Macintosh has one. So it's impossible to push the wrong button.

The Mouse itself. Replaces typed-in commands with a form of communication you already understand – pointing.

The inside story – a rotating ball and optical sensors translate movements of the mouse to Macintosh's screen pointer with pin-point accuracy.

Apple credit card available at participating dealers.
For your nearest Apple dealer, outside Sydney call toll-free (008) 221555 or Sydney 908 9088.

Ap140R/Palace


343mm (13 1/2")
277mm (10 9/10")
247mm (9 7/10")
Mouse connector.
External disk drive connector.
RS232, and RS422 Appletalk/ serial communications ports for printers, modems and other peripherals.
Polyphonic sound port.
Ultra compact, switching-type power supply and high resolution video circuitry.
Battery for Macintosh's built-in clock/calendar.
230mm (9") high resolution pixel bit-mapped display.
Built-in handle for getting carried away.
Thanks to ample venting, Macintosh needs no internal fan.
Brightness control.
128K or 512 bytes RAM.
Built-in 90mm (3 1/2") disk drive.
Connector for keyboard and optional numeric keypad.
32-bit Motorola MC68000 microprocessor.
64K bytes ROM.
Clock/ calendar chip.
Macintosh's digital board – the processing power of an entire 32-bit digital graphics computer in 80 square inches (516 sq. cm).

Apple®

designed to be used as the building blocks for making turnkey programs for major businesses. Pretty much any database will suit what I have to do; what I am basically looking for is speed of searching. This I get from *Overvue.*

The only debate I ever have with databases is whether I want a menu driven program or command driven program. When you first start, menu driven programs seem precisely the way to go. I started off using *PFS:File* which is a very powerful database program indeed and is one of the best selling databases of all time. But it runs using a menu program. Now this is perfectly fine

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"It is by far the most popular database in the world and beyond argument has the most complicated and unintelligible book of instructions. Once you have learnt it you can probably file every piece of information the world has ever known. "

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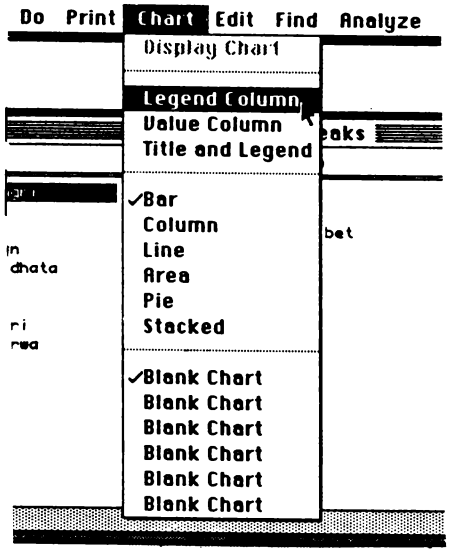
when you are first starting to learn how to use your database. It makes life much easier and much simpler.

But after a while you find that going through all the details of the menu slows you down tremendously and you long for a command driven database, of which by far the best known is *dBase II.* This will operate on your Apple providing you have CP/M. It is by far the most popular database in the world and beyond argument has the most complicated and unintelligible book of instructions. Once you have learnt it you can probably file every piece of information the world has ever known. Learning it however is not easy. But once you have learnt it you will find it's much faster than most other databases.

The simplest way I can describe a database is to think of a big collection of cards on which you are going to enter information. Top left hand corner you may put a name and address. Top right hand



corner you may put a telephone number. Underneath you might put a few comments regarding the person and the company they work for. Then you may add another line giving their job description. Finally you might put yet another line which gives the full name and address of their company. With that card you have all the information you really need about anyone. Anything else you need to know you will probably fill in from your own memory.

The key to running a successful database is to define the card at the beginning so that it is large enough for you to put in all the information that you require but not so much that it is going to

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"The key to running a successful database is to define the card at the beginning so that it is large enough for you to put in all the information that you require but not so much that it is going to take up a vast amount of your computer's memory."

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The very first rule of databases is that the more time you spend in designing and setting up the initial field, the more time you will save once you have got the program running. I really cannot emphasize this enough. The more thought you give to what result you want before you start, the easier life is going to be for you. Nearly all the work in using a database is entering the information.

Most databases let you reconstruct - at least in part - the way in which you have laid out your original format, if halfway through you find it's not quite what you wanted. But not all. And not easily. As it happens *Overvue* is the easiest of all databases to modify in mid-stream. It's far better to get your priorities sorted out before you start. You need to work out what you are going to list in the database and, perhaps more importantly,exactly what reports you need to extract from the database.

Once you have used the database for a simple system such as entering the names and addresses and telephone numbers of all the people you contact, you will keep thinking of new uses for it.

For example I started off with that as my first database, my second one was to control the articles and reviews that I have written. And I am currently working on the third database, which is going to list all the books that I have in my library

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"If you have a computer and you are not using a database then you are not using a large amount of very useful power."

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divided by classification. You would think that I should be able to tell what books I own. But I keep wanting to look up a piece of information about a computer and I know that piece of information is in some book somewhere, but finding it takes me hours. With a properly constructed database I will be able to do it in minutes.

It really doesn't matter what your hobbies are, or what you do for a living. If you have a computer and you are not using a database - no matter how simple - then you are not using a large amount of very useful power.

And you are wasting your time looking for things which the computer could find for you instantly.

MAILING LISTS

THE THING WE use the Apple for the most in our office is to keep a list of the names and addresses of everyone who subscribes to the magazine and everyone who writes for it. We use a fairly simple mailing list program which is in actual fact part of *Wordstar.* The reason we use it is very simple. Gene Stephen has had a tremendous amount of experience in working with CP/M, and it was very easy for him to set up a program that would use the power of *Wordstar* and link it to *Mail Merge.* Under any other circumstances we probably would have gone with a totally different system, as neither of the two programs is particularly easy for an absolute beginner to use. Now we have them we have got used to using them and we are extremely happy.

"Processing a list of names and addresses is extremely easy provided you have the correct program and enough memory."

Peculiarly, and this shows how disorganised we are, we keep another set of mailing lists using *Zardax.* This also resides on a hard disk and works perfectly well. But it doesn't have the powerful sort features we need for extensive mailings.

Anent which a story with a moral.

The publisher and editor of this magazine decided to initialise a *Zardax* disk on which to put some of his demented scribblings.

As he appears, on the surface, to know what he is doing, and he is, after all, the boss, he was let loose and initialised a disk on the standard machine.

Sadly, because he didn't check first, he initialised the hard disk and not the floppy he had inserted and wiped off every single name and address.

Luckily, every single one had been religiously backed up on floppy disks and so it was only the matter of an hour or so's work to reconstruct the whole mailing list.

But let this be an awful warning to you.

Always make a back-up. Or you, too, will live to rue the day.

If we had unlimited hard disk space on our Macintoshes, and if they were not so overused for other purposes, we would be sorely tempted to switch the whole shoooting match over and put it on *Overvue*, which is faster, smarter and easier for new people to work and understand.

Until we get another Mac we will stay with *Zardax* and *dBase II.*

Processing a list of names and addresses is extremely easy, provided you have the correct program and provided you have enough memory. When you start to run into a list of thousands of names, then you really need a hard disk or you are going to spend a lot of time shuffling disks backwards and forwards. The size of the hard disk will, of course, depend on the number of addresses you use.

Almost every mailing list program is in fact a form of database, and you can frequently use one of the standard databases such as *pfs* or *dBase II* to operate as a mailing disk.

However mailing list programs which have been specially designed for the task, although they are still a type of database, include extras which are specifically designed to sort out the names and addresses and, more importantly, make sure they print on labels and onto letters.

"Always make a back-up. Or you will rue the day."

They leave out the database features which are unimportant and instead add other features which make life easy.

All mailing lists have five points in common.

One: there has to be a way of entering, altering and deleting names and addresses.

Two: There has to be a method of letting you know how long the names and addresses have been in the list and whether they should be deleted or not.

Three: there must be a method of printing lists and mailing labels.

Four: there must be a way of integrating the names and addresses into a standard letter.

Five: there must be a way to sort the list whenever you need to.

The sort of program you use really depends on the number of names and addresses you are going to enter. In truth, if it is going to be less than fifty you could probably do it better without a computer at all. Just do it by hand. Once you get over that magic figure you will find that a mailing list will save you hours and hours of time.

Our mailing list is entered into a hard disk and then printed out on a C.Itoh 8510, and the whole system is linked up to an Apple IIe which contains a Z80 card. It appears that we have more wires floating around than a power station, but the fact is that it works and it works every time. The only time we ever have any problems is with the paper sticking in the printer. I guess the fault lies with the paper, not the printer.

Everybody seems to be very keen on doing comparative tests between mailing systems. In fact we found it fairly pointless. It's true that some systems will sort out names and addresses faster than others. But we cannot see how in any way that is relevant. With a mailing list by far the most time you are going to spend is in printing. The fact that one program will sort out a list of names and letters in seven seconds while another will take just over a minute to do the same task does not really make very much difference when you are going to be printing out for at least one hour. Out of interest we have fou¯nd that on the Macintosh the fastest is *Overvue*, and on the Apple IIe Apple's own *Quick File 2* were by far the fastest when it came to sorting.

A mailing list program adds considerably to the worth and utility of your computer. The great trick to using one properly is to plan ahead working out what your needs will be in the future. This is what we, in this company, signally failed to do because we have two different systems working on two different machines.

As the old saying goes - don't do as we do, do as we say. Plan ahead and all will be well.

Getting the most out of AppleWorks

Using the Database to print on sticky labels

by Errol Chopping

General information

This paper is designed to help you get the best out of your AppleWorks database software in one particular application. It is not my intention to teach you how to use AppleWorks generally as the manual itself does that quite well.

I will be writing other such articles on other parts of the software from time to time and so this paper is quite specific, dealing with one aspect only.

The application

The AppleWorks database allows for two types of printing reports. This article looks particularly at the "labels" type report and aims to guide you in obtaining correct results on sticky peel-off labels.

The ability to print the contents of a database file onto sticky labels can quite handy. The obvious application is for preparing address labels ready to be placed on envelopes. However, the sticky labels may be useful for other items as well. If you have an inventory of items forming some sort of stock list, you could use the stickers as actual labels to be placed onto boxes.

Examples that come to mind include library books, video cassettes, wine collections etc.

The problem

When you first try the "labels" type report you may find a few problems. These usually occur in the incorrect alignment of the printed lines on each label or in the annoying "form feed" of the paper after each set of seven or eight labels and result in a waste of paper and time.

The solution

The method of obtaining correct label printing lies in two main parts.

1. Defining a new printer designed specifically for printing on sticky labels.
2. Correctly setting the layout of the data in each label and setting the print options for the report.

Defining a special printer

* From the Main Menu of AppleWorks, select option 5: "Other Activities"
* Then from this menu select option 7: "Specify information about your printer(s)"
* Now select option 2: "Add a printer"

(Note that if you have three different printers already defined you will need to "remove a printer" before you can add a new one. However; removing a printer does not mean that it will be lost forever, it may be added in again without difficulty later.)

* Now you will be presented with a list of some 11 different printer types from which to choose. Go ahead and choose the printer you wish to use, give it the name "LABELLER" or the like and move on to the next step.
* After choosing the Slot number for the printer (almost always Slot 1), you will see a list of four items. The second one on this list,

"Accepts top-of-page commands....Yes"

needs changing.

* Change this item to read .....No

(This effectively tells AppleWorks to print blank lines in order to move the paper through the printer rather than depending on the built in "Form-Feed" code in the printer.)

* Press 'ESC' a number of times to get back to the Main Menu.

Setting the correct layout of the label report

Now comes the time to deal with the layout of the data to be printed. After pressing Open-Apple-P (to get to the print features) you will probably have to "create a new 'labels' format" and give it a name. You should be able to manipulate the categories you want printed by using the editing functions. You can view these by pressing Open-Apple-? (Help).

As most popular sticky labels allow 8 lines of text, you will probably have to restrict the number of lines actually printed to 8 or less. There is information about the size of labels in the next section.

There is no need to insert blank lines in the format specifically to make each label print exactly 8 lines, as the printer options will take care of that detail. Thus, you should only insert blank lines when you want to have them actually printed in each label.

Setting the correct printer options

* Press Open-Apple-O (Options) and you will be presented with a screen full of various paper settings and printing options.
* Using a rule, measure in inches (!), the distance from the top of one label to the top of the next. The result could well be 1.5 inches as this is a popular size for standard labels.
* Now back to the Options screen. Type PL (Page Length) and enter 1.5 (or whatever the measure was in the previous step). If you use 1.5 inches for the page length, you may notice that the options now show that there will be a total of 9 lines on each page. We are in effect saying that each label represents a page.
* Type PH (Print Header) to switch this option to No. This will ensure that the name of the file etc is NOT printed.

There is nothing left to do now but press 'ESC' to leave the printer options, then press Open-Apple-P to begin printing.

When asked which printer you want to use, don't forget to select the newly added "LABELLER" printer. It is a good idea, before you actually print, to switch the printer off, align the labels with top of the first label directly uder the print-head, then turn the printer on again. This allows AppleWorks to correctly count the number of lines in each label (page) and thus keep the data at the correct spacing.

When the printing is finished, tear off the paper as closely as possible to the patten (roller). If you try to wind too many sticky labels backwards through the printer they may get stuck... the high-gum types are extremely difficult to remove if they jam in the mechanism!

Hints for creating a labelling database file

Naturally, it is up to you what data you print, but I have included a few hints which you may not have thought of.

* If you are printing address labels which go to a standard type of client, for example "The Administrator", "The Secretary" or "The Principal", then why not add a category to your file to hold this title for every record.

There are two efficient ways to do this:

1. Enter the title into one record only, then, in the multiple record layout, use the Open-Apple-" (ditto) feature to quickly copy it into all the records.

or

2. If you are just starting to enter information into the file, why not use Open-Apple-V (standard Values) to automatically have the title appear in all records as they are inserted.

* Remember that you need not always have each category printed on a new line. If you use the Open-Apple-arrow keys to move the categories around on the label then you can have the text printed horizontally. If you have two categories printed on the same line, and the first contains no data, then the data from the second category will be moved to the left margin. You will have to use the Open-Apple-J (left-justify) feature on the second category for this to work properly.

* Using the Open-Apple-V (print category name AND data) can be useful when making labels which identify objects. For example, wine bottles could be labelled as follows:

Maker: Rothbury Estate
Grape: Shiraz-Merlot
Year : 1979
Comments:

Summing up

The explanations shown here are not perfect. I hope they do give you, the AppleWorks user, a clue to getting more use from the database application.The only way to make the label style report work for you is to spend some time playing with it. Perhaps in this way, you can do more with the information than merely record it.

If you discover other useful and unusual applications for any of the AppleWorks software I would be very pleased to hear form you. I will be writing other papers on related topics from time to time.

Errol Chopping
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DUBBO N.S.W. 2380
068 811 324

See the November issue of Australian Apple Review for another article by Errol Chopping on AppleWorks: *Using the database to produce a numerical synopsis.*

Watson, come here, I want you

These were the epic words which first trilled down a telephone wire and opened the world to verbal communication at long distances. The telephone has come a long way since then. Now it is possible to use your computer to not only store telephone numbers but also to dial the number for you. This "Look Ma, no hands" seems destined to revolutionise the way we use the computer. DUNCAN McCANN has written this special report on *Sidekick*, the first serious program of this sort for the Macintosh.

A new category of personal computer use: telephone management, will soon join the big five - word processing, accounting, spreadsheeting, games, and telecommunications.

Telephone communication programs - such as *Sidekick* for the Macintosh - make easier every aspect of spoken telephone communication - hence, telephone management.

It's not so hard nor so complicated as telecommunications, either. Take *Sidekick* as an example. This is a program you can have residing on your hard disk as an accessory - you can have it on a floppy but it is much more effective with a hard disk. All you then need is the correct Macintosh modem and you are off to the races.

So what does this *Sidekick* do? (The word *Sidekick* can best be translated into Australian as "My little mate"). Here's a look at the highlights:

A Rolodex-style phone book that stores names, addresses, phone numbers, and any comments you'd like to make about the person or business on the card. Sidekick will sort by name or by category. Select the person you want to call from the Sidekick pull down menu. Then, with the push of a single button, it dials the number and beeps when someone answers.

You pick up the phone and talk.

No answer?

Sidekick will call back.

Busy?

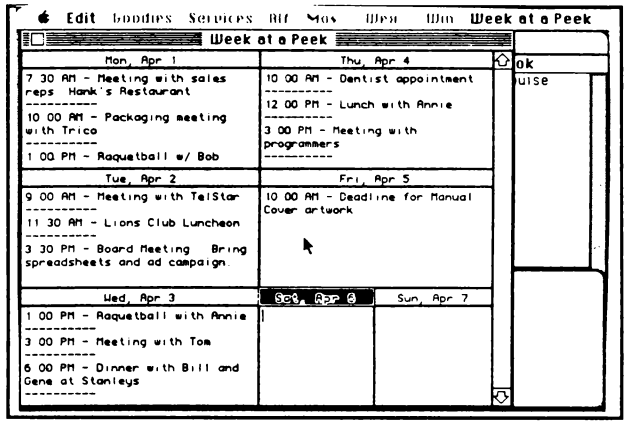
Sidekick keeps calling until the party is off the phone, then lets you know the call is successful. *Sidekick* creates a file that allows your word processor to print out phone lists or mailing lists from your cards.

Sidekick will record the call, how long it took and who it was to and also list exactly how much it cost according to Telecom's published rates. That this will lead to some fine, fast and furious rows with Telecom when the bill comes in there is no doubt. It will also allow you to type in any notes about the conversation while it is happening and affix the notes to the PhoneLog. *Sidekick* will also list the time and number of incoming calls without, of course, adding on the charges.

Calendar and diary

Sidekick keeps a calendar for the next five years but also keeps a list of all appointments for the week ahead. These can then easily be printed out in pocketbook form to carry in your wallet. Note, when you are printing out *Sidekick* immediately becomes a printer spooler so the computer is freed while the printer is chattering away. Neat.

Week-at-a-Peek



When I first tested *Sidekick* it carried all the area codes for American cities. It is a laborious process but I am now changing it over to the Australian system becuase it is so handy if you are involved in a lot of inter-state calls. There is also a box to enter the time difference which will be handy for the banana benders in Queensland who have to do without the dubious advantages of summer time daylight saving.

Sidekick incorporates a business calculator - not just an ordinary calculator which you get in the standard accessories. And, it also has an analog clock - as with hands rather than numbers - which you can have displayed when the machine is in a relatively idle mode.

Add to this the fact that *Sidekick* contains a mini word processor for taking notes and a series of list and record keepers for entering your expenses and you begin to see how *Sidekick* could become an indispensable tool for a business executive. Finally, *Sidekick* has a built-in terminal program and a printer driver.

Full advantage

When using *Sidekick*, you think of certain groups of people who will use this program to its fullest advantage.

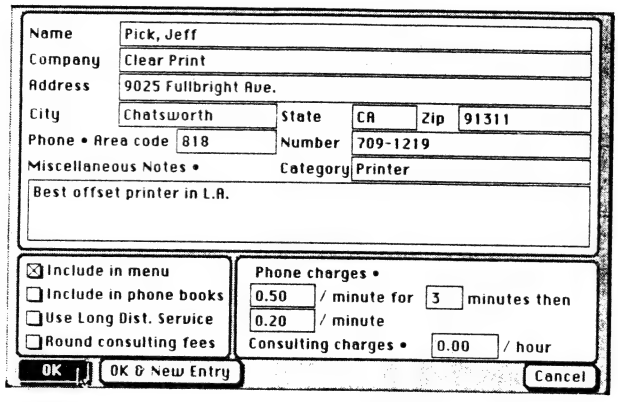
Three immediately come to mind:

The busy business person, maybe in sales or promotion, who seems to be on the phone almost all the time.

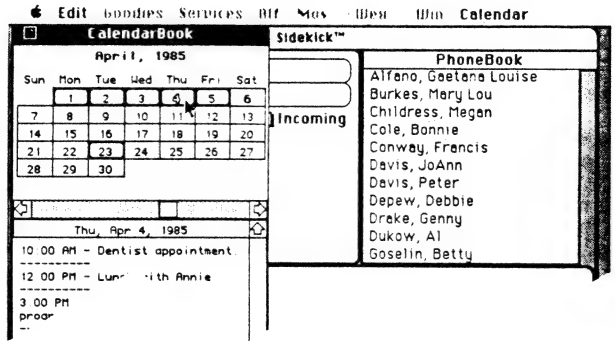
The self-employed person who cannot afford a secretary, but to whom the phone is an important tool.

Finally the person who simply loves the latest gadget, your average state of the art addict. For all these people, *Sidekick* is a must.

Take the dialing feature. *Sidekick* looks up any person or business based



Phone Notes



CalendarBook

upon any information you happen to remember about the person or business.

Asking *Sidekick* to find "plumber" will do it.

The card for the plumber is displayed on the computer screen. But what if you didn't want the plumber plumber?

What if you wanted to call Christopher Plumber?

The push of another button finds the next plumber - either name or occupation - and displays his card.

Then, after the correct card is found, with the push of a single button, *Sidekick* dials it.

No answer? Busy? No worry. *Sidekick* keeps dialing until it gets through. Imagine never having to redial a busy number again. (Imagine never having to dial another number again, period.)

Sidekick is a blending of the power of a computer with something we use dozens of times a day: the telephone.

And it seems to have built in the ability to change the way an executive regards the computer.

The possible scenario seems not only possible - it seem very likely.

The executive comes into his office in the morning, switches on the Mac and leaves it on all day.

When calculations are needed the Mac takes care of it.

When calls need to be made Mac dials the number - automatically.

When there are notes to be made during a call the Macintosh stands handy.

Any appointments can be entered and later printed out. At the same time the Macintosh can be set with multiple alarms to remind you of each appointment.

Any expenses can be entered into an expenses sheet - automatically.

If the Macintosh is connected through a modem to Minerva or even Viatel there is even the possibility of it become an electronic messaging machine.

What *Sidekick* does - amongst other things - is marry the power of the Macintosh to the new facilities available on the telephone network. Some might consider it a marriage made in heaven.

Stop the talk: ♬♪♪♪♬♪
Let's make music with the Apple

by Ric Richardson

LAST MONTH I stuck my neck out and made quite a few assertions about home computers and music. And after a month to think it over I find myself even more resolved in my stand.

You see, since the last article I have been discussing and redefining many of the ideas that were first put forward.

Many of the problems that, to be honest, I had not considered, were brought to my attention when I had the privilege of talking at length with a gentleman from Radio 2JJJ in Sydney.

But first let me reiterate what my theory is concerning home computers and music in the very near future:

1. That the use of home computers will gradually veer away from the playing of video games to more creative applications such as music making and the arts.

I back this up with the basic fact that most people lose interest in hobbies unless they can be creative and are allowed to express themselves.

2. That there are possibly a great number of home musicians with organs, synthesisers or guitars out there who also have computers, because they are both ways for people to enjoy hobbies or to be entertained IN THE HOME.

3. That as an alternative to organs, we will see a combination of sound modules and computers being used to make music in the home. This point I feel is valid because:

a. The sounds being made available in these sound modules are just as professional as those you hear on a record, at a price and ease of use that is far superior to any organ.

b. That these modules when coupled with a computer, that could be used as tutor as well as controller, would combine to provide us with the most awesome home music making machine ever seen.

4. That using a computer for this type of hobby is not the task it once was, keeping in mind Australia's increasing rate of computer literacy.

These four main ideas spring to mind, although they are but a small part of the points discussed in last month's magazine. If you would like to follow my reasoning further, why not look up last month's issue.

But now let's look at some of the issues raised by our friend at 2JJJ. To mind I can recall three main points of contention.

These were:

Firstly, given the PRESENT standard of software, that normal people would find the MIDI controlled Music System to be too hard to operate.

Secondly, that even if easier, more user friendly software was provided, there just isn't the computer literacy amongst the public to make this hobby into anything more than a passing fad for bored home hackers.

Thirdly, that many people while looking for a musical instrument are actually investing in a piece of furniture also.

To be fair there is some validity to these points. But may I give you an alternative viewpoint?

Well, firstly I do concede that the software available now to run a computer controlled music system would be hard for the general public to use. But it must be remembered who this software was made for. The programs available now are born from necessity for professional musicians in the majority of cases.

Even so, from what I have seen these programs present no more problems than any decent word processor.

As to the computer literacy of the average Australian, have you seen the trip computer in the latest Ford Fairlane, or seen the figures on the numbers of computers being used in public, secondary and tertiary education?

With our organ buying general public in mind, why not have a look at Roland's centrespread advertisement in this issue. The electric piano used there can serve as a MIDI controller, while at the same time it looks just as good if not more substantial when compared with most organs.

Besides, if you want a piece of furniture, wouldn't you rather a lounge for the price of one of these antiquated music boxes?

Your verdict? Well, whatever it be, I propose to take this project one step further. In order that we get the most benefit from working with a MIDI system as I have already spoken of last month, we must stop talking in generalities. We must start looking at some sort of standard so that the Workshop be efficient. So here goes!

The proposition

From my investigations I have found that we need three main components. Logically there is software and an interface. The hinging factor is the next piece of equipment, the Sound Module. The last bit of equipment, the MIDI controller, is the most adaptable in our plan.

As controller all we need is a simple keyboard fitted with MIDI. This can be anything from a Casio mini keyboard to the $2,000 plus Mother Controllers available from Roland.

I have opted for a happy medium between the two by using a MIDI equipped electric piano that has touch sensitivity for around $1100. Not that you have to invest this much, as a no-frills keyboard will still out-perform most organs.

Our next choice of equipment is crucial if our workshop is to be a success. If possible I would like to go with a particular sound module that is made by Roland. If you cast your eyes back to their advertisement you will notice a little white box sitting just above the electric piano in the ad. This is the MKS-7. And

what a little marvel it is. In a nutshell, it has drum, bass, chordal and melodic sounds all in one package that can be controlled independently by the computer. I give my personal guarantee that this little box will fill your wildest musical dreams.

I know it is a bit much asking you to go out and buy equipment that has a recomended retail value of just under $1600, but if there is some substantial interest we may be able to arrange a better price for our readers.

This fact aside, the price still represents a fraction of the cost of an organ, and believe me the sounds are really great.

As a matter of fact I recorded some songs using this module and I invite any of you to send me in a tape and I will transfer some of what I have done and send it back to you.

The next component that really needs to be kept as standard is the software and interface package that we use. Where do we get this from? You guessed it!

I know it sounds like a sales pitch for Roland, but they simply have been the most supportive and cooperative of the people we have approached.

Besides this I have found the equipment offered in our MUSIC COMPETITION, gear willingly supplied by Roland, to be simply the best available in Australia, whether it be from Roland or anybody else. The prices quoted are recomended retail in the competition advertisement, but as I will show you, those unlucky enough not to win in our competition will hopefully be able to reap the benefits of a deal we are trying to work with Roland.

The program actually works like a tape recorder, memorizing every note you play, how you play it, and then replaying it while you layer other sounds over the top of it.

Very quickly you will be able to write a song with drums, a bass line, synthesizer chord backing as well as a lead melodic line. A complete, very impressive sounding piece of home made music.

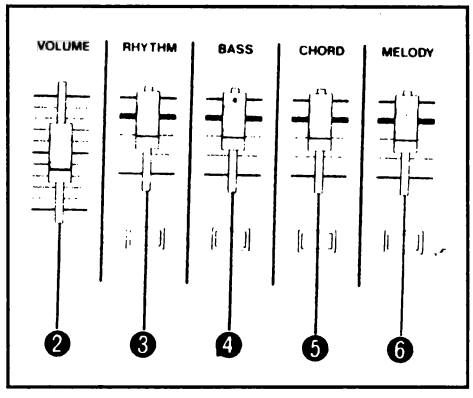
In the driver's seat

Don't believe for one second that I would go and leave you without first having a closer look at my proposal. First let's look at the sound module.

Using the diagram MKS-7 Operation Table diagram below and a few other diagrams we can get a brief idea of how the module works.

The four sliders numbered 3,4,5,6 control the volume of the sounds produced by the four separate sound producing modules. Slider number 2 controls the overall volume of the four outputs combined.

Sliders



Next we must find out how the computer communicates and controls these four separate sound sources.

To do this each section must have messages that can only be read by one particular instrument in the module, otherwise you would have the drums playing the bass line and goodness knows whatever else happening.

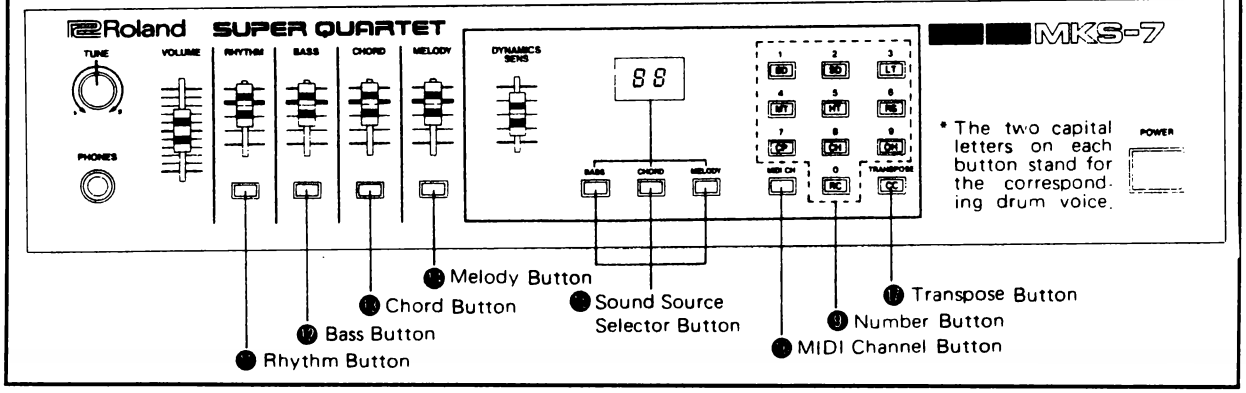
This problem is solved by MIDI, which is a system for communication between computers and musical instruments that relies on a series of 16 channels. This can be illustrated by looking at a radio.

Although all the radio stations are sending out their radio waves, your radio will only pick up the radio waves that you tune in to. MIDI is practically the same, only the the messages are not radio waves but electrical impulses that travel in leads connected between the computer and the musical instruments.

This way a computer can send out instructions on what, for example, the drums are to play. Provided you send using one particular channel, and set the drum part of the module so that it will receive instructions on the same channel, you will have one smooth running computer controlled musical instrument.

When this particular module is turned on, the four separate sections or instruments have been given "default" or pre-set MIDI channel selection. Rhythm is set to MIDI channel 10, Bass is set to

MKS-7 OPERATION TABLE



The building blocks of today's music are
A keyboard that looks, sounds and plays like a
computer...You'll learn, teach, write, arrange,
record, entertain and explore the very future
sound barrier to Roland.

ready to journey with you to the future.
piano. Add a sound source and your home
orchestrate, multi-track
e of music. Cross the

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DB 3002

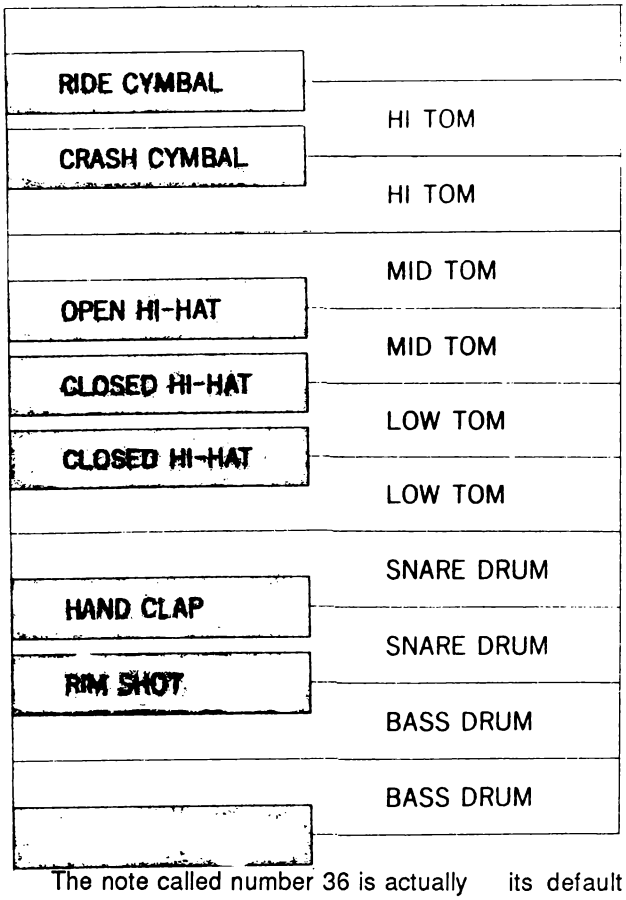
When this particular module is turned on, the four separate sections or instruments have been given "default" or pre-set MIDI channel selection. Rhythm is set to MIDI channel 10, Bass is set to MIDI channel 2, Chord to channel 3 and Melody to channel 1.

These channels can be changed at your disposal so that you could see what it sounds like to have the rhythm instructions from the computer control the bass line, or vice-versa. Just this feature could keep you happily locked away in your bedroom for days.

Next we are confronted with selecting which of literally hundreds of sounds we want to use for each section.

For the rhythm section we have a full range of sounds that are actual digital recordings of real drums.

These are played from the controller keyboard by using these keys:



The note called number 36 is actually bottom C, for all those music buffs out there. The only control that you have over these sounds besides normal playing can only be achieved with a touch sensitive keyboard where you can have a bit more control over how loud each drum or cymbal is played.

Next we have twenty different bass sounds to choose from. On top of this the chord section and the melody section both have a variety of one hundred different sounds each. And these are only the pre-sets. If none of these strike your fancy then you can make up your own. Another two days, at least, locked away in your bedroom!

With this kind of equipment not only will you get the jump on organ players, but most likely you will be better off than most professional musicians.

As controller you really only need any MIDI equipped keyboard, although if you are interested I found the Roland electric piano model EP-50 to be just the thing.

Now to the software and interface. The products mentioned in our competition are best available that I can find so far. If all goes well we may have some things to make using the software a bit easier, and I'll tell you about that later. But for now let me give you an overview of what the software does.

The Roland package called MUSE for the Apple has eight different tracks to record on. The layout is simply a series of screens, full of information with access to various help screens. For each track there are four main functions to use:

1. A record mode function
2. A playback mode function
3. A channel select function;

this allows you to get the computer to record the notes you want played straight from the MIDI controller keyboard before selecting which section of the module you want it to go to. If the module is used with its default settings, you could dial up channel 10 to get drum sounds to play, channel 2 for bass sounds, channel 3 for chord sounds and channel 1 for melody.

4. And Quantization: this being a whereby you can have the computer automatically fix up your timing mistakes.

If all of this escapes you then don't despair, I will try my darndest to make it as easy as possible for you to get going.

Actually, I don't blame you if you found it hard to grasp how the software works, it is understandable since the program has obviously been designed for people who are familiar with professional music making techniques such as multi track recording.

Out of our three components, this, the software, will need the most space in our proposed workshop. None the less we do have a few tricks up our sleeve to help our readers.

Are you interested?

Before we can do anything drastic we desperately need to know how many people are interested in this project. So please WRITE IN or if you can't write in, ring us and let us get some feedback. In the meantime I will try to get a few things going.

How about:

* A good price through Roland themselves or one of their retail outlets.
* Maybe a package deal where the software is somehow included in the price.
* Some reliable source of information for further enquiries on MIDI.

On top of this I will investigate:

* What we need to run a tutorial workshop based around the specific system mentioned here.
* The viability of producing a demo disk to be used with the music software as well as a small booklet designed to get you working with the program with a minimum of fuss.
* How about we include some songs from Nik Kershaw or other popular musicians to show you how it all works.

Please remember that all of this relies on your response and support, so drop us a line and let us know if you are interested.

Remember all entries for our MUSIC COMPETITION close JANUARY 25 with the winner being decided on FEBRUARY 1. So get your entries in soon.

WIN

Music Software plus an Apple MIDI Interface from

Roland

worth $520

All you have to do is clearly print your name, address and phone number on a piece of paper and send it to:

The Australian Apple Review
Music Competition
Top Rear, 4 Carrington Rd
Randwick, NSW 2031

Prizes consist of:
Software - Roland Music Recorder
Interface - Model MIF - APL

The music goes round and round and it comes out here - to MIDI standards

One of the great movements in standardisation has been led by the electronic music companies. Now, computer created music will interface with almost any electronic instrument because of the MIDI standard which is an object lesson to computer manufacturers on how to work to a standard - and keep to it. A special correspondent reports on this development which affects all the myriads of music programs now available for the Apple II and the Macintosh - most of them adhering strictly to the MIDI standard.

IN A WORLD bedevilled by incompatiblity, the Musical Instrument Digital Interface standard - known as MIDI to its many friends - shines out like a beacon. Using it, you can hook up a host of different electronic musical instruments with just a simple two wire cable.

The result of this quiet revolution has been a rather noisier one in the pop music world. Where the electric guitar's raw sound once reigned supreme, the infinitely-varied musical synthesiser now holds court.

In the 1970's, synthesised sound waves which we hear as musical tones were mimiced within the synthesiser by means of smoothly varying voltages. Perhaps the most famous of these early analogue synthesisers was the Moog, which featured on popular albums such as Switched-on Bach.

When building their own machines, other manufacturers used similar analogue techniques - but not quite similar enough. The result was incompatibility between different brands of synthesiser.

An alternative to analogue synthesis is provided using digital techniques. Instead of mimicking the smooth variation of a sound-wave exactly, you measure its value many times a second, and so convert it into thousands of numbers which contain most though not all, of the information about its shape.

This is the technique used in Compact Discs, where the analogue technology of grooves on a record is replaced by numbers, represented by microscopic pits in the surface of CD which are read by the scanning laser beam during playback.

Digital standards

Mindful of the earlier problems of incompatibility, manufacturers got together to hammer out a common standard for the new digital synthesisers. And so, based on suggestions from Dave Smith of the US-based Sequential Circuits, the MIDI standard finally evolved during the early 1980s.

MIDI works by laying down quite rigidly how musical information is to be encoded digitally and passed between instruments. At its most basic. MIDI specifies how to signal the start or finish of a note, its velocity - which is synthesiser terminology for how loud it is - and its channel.

The last parameter is an important feature of MIDI.

Without it there would be no facility for linking several instruments together - one of the main benefits of the standard.

By assigning a channel number to each of the MIDI instruments being used together, it is possible to play different notes simultaneously on the different instruments. As its name suggests, the channel number is rather like those on a television; a MIDI instrument can tune in to a particular channel and ignore the rest, even though all channels come down the same piece of wire.

As far as the physical connections go, MIDI systems have three sockets, all of them using standard DIN plugs.

These are MIDI In, for receiving MIDI information; MIDI Out, for outputting any MIDI signals generated; and MIDI Through, which simply sends a carbon copy of MIDI in down the line. In this way, data can be passed on from machine to machine, allowing each to select the relevant channel.

In addition to basic information such as when a note starts and stops, and how loud it is, you can also signal the "patch" required.

Wide range

Much of the power of synthesisers derives from the fact that you can draw on a wide range of sounds, either preset or built up by you. These patches, or collections of sounds, can be saved and called up later as needed. MIDI allows you to change the preset sound on each note by drawing on this library of sounds.

There is also a group of MIDI signals which are called "system exclusive".

What the rather grand name hides is an official break down of the MIDI standard. The signals are system exclusive because they work exclusively on a particular brand of synthesiser - for example they may control some unusual feature not generally available. Each manufacturer is given its own code so that machines recognise their personal instructions.

That aside, MIDI is certainly an impressive achievement.

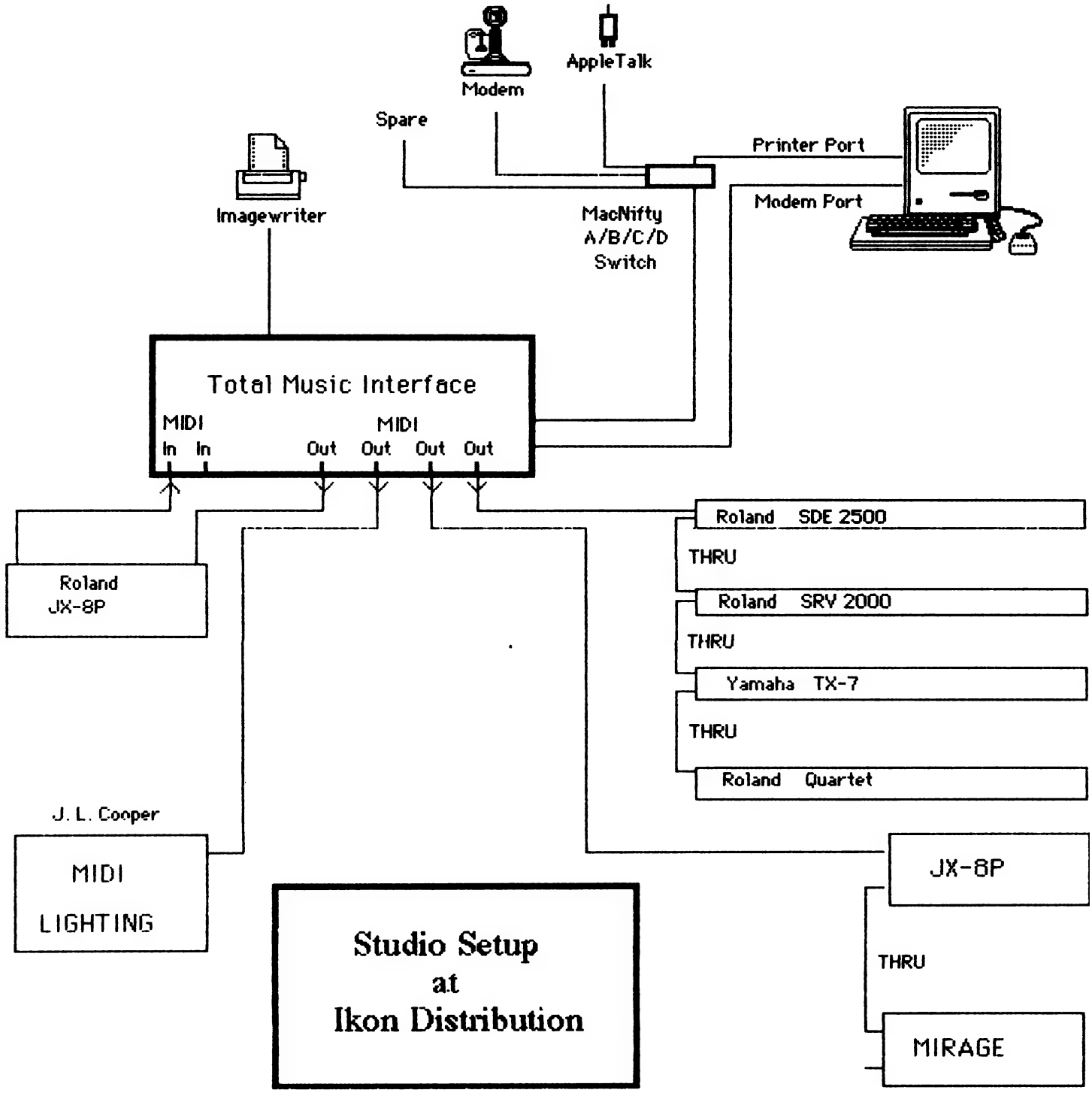
As a result of the standardisation it has imposed, digital synthesis techniques are now the norm, and even state-of-art machines like the Fairlight CMI have MIDI outputs.

Out of it, completely new musical techniques and resources have developed. For example the growing use of sequencers can be attributed largely to MIDI.

Expanding sequencers

Sequencers are essentially digital tape recorders with no moving parts. Instead

MUSIC WORKSHOP



of storing sounds in analogue form as varying magnetic fields on tape, the MIDI information is held in a silicon memory, just like the Random Access Memory in computers.

As will as being very compact, free from mechanical problems like wow, flutter or tape hiss, sequencing allows complex manipulation of the stored sounds in a way that would be impossible using tape. For example, you can step through a sequence of notes slowly, and alter or add to the stored or add to the stored patterns. You can speed everything up, transpose it - all at the press of a few buttons.

As well as synthesisers and sequencers, there are now many other purely digital MIDI devices, for instance delay lines. but undoubtedly the most interesting development since the MIDI field are those involving micros such as the Apple II and the Macintosh.

Clearly the digital format of MIDI lends itself well to micro computers. Some even come with a MIDI interface as standard. For the rest, little work is required to convert the RS232 communication ports - found as standard on Macintoshes and easily fitted to the Apple II - into MIDI connections.

Direct control

Micro computers can be used to give the musician very direct control over the many MIDI parameters, setting and selecting patches for example. They can also adopt a more active role, applying their computational power in "real time" - that is, as things happen.

One example is the automatic transcription of music while it is played on a keyboard or other MIDI instrument - potentially a great boon for composers. Programs which compose back at you interactively as you play are another possibility.

As well as its lack of total standardisation, MIDI does have several serious problems.

The description here of signals being passed down a chain of synthesisers which then play simultaneously is somewhat idealised. For a start, the MIDI signals become attenuated over distances greater than about five metres, and so need boosting.

But the biggest drawback is synchronisation.

Since all the channels are sent down the same pair of wires one after another, there is inevitably a fraction of a second delay between the information arriving on each channel. As a result, notes of a chord would not be perfectly together when played on several synthesisers; unfortunately the ear can often detect such slight lapses, and the result is music lacking any real attack or impact.

The problem results from the initial specification of MIDI - musicians, apparently, are allergic to fat cables and lots of wires, so the two-wire system described above was adopted.

This forces MIDI to be serial: that is, each piece of information has to be sent down one line one after another. This is inevitably slower than parallel transmission where several signals can be sent at once down several wires connected in parallel.

Now that MIDI is so widely used, constraints like these are becoming more irksome.

Various suggestions for MIDI II have been made, and doubtless a new and improved standard will emerge. Whatever happens, there can be little doubt that from now on music plus micro computers will spell MIDI.

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a subscription to The Australian Apple Review

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Educating the Apple

by Lynne Ryder

DML Comparison Kitchen, Fish Scales Animal Photo Fun

Supplied: *12 page manual, colouring-in sheet, disk, warranty card.*
Requirements: *DOS 3.3 on an Apple +, IIe or IIc and 48k*
Cost: *$39.95 each*

THREE PROGRAMS this month come from the same source and show that when you have a good idea,duplicate it - or in this case triplicate it.

The programs, from DML, are aimed at younger children in about the six to nine age group and are *Comparison Kitchen, Fish Scales* and *Animal Photo Fun*. To say they are similar would be to understate, as page 2 of each of the manuals should support.

Comparison Kitchen

Comparison Kitchen is a set of programs which are aimed at developing perception skills. In Cookie Hunt, the first of the activities, the child has to find the cookie which matches the Chef's. At the beginning, the odd man out is obvious. Further through the game,the differences become more subtle. But, the game only plays the one level. This I found the most annoying aspect as older children are at first interested but switch off when the simple choices appear.

The Bake Shop continues in the same vein, but is possibly the best activity on the disk. Here the child has to 'make' a cookie to a particular recipe. The activity involves selection of shaped cookie cutter - small and larger sizes of three shapes and then decorating with the correct colour icing.

The graphics and the animation are excellent,if at times slightly drawn out. However, the children are kept interested and motivated. One point is if you have a monochrome monitor, keep well away from Bake Shop. The icing colours become virtually indistinguishable and lead to only half a meaningful activity.

'Which is Less' and 'Same or Different' continue to reinforce visual comparisons,and Bake Off 1 and 2 are games.

Of these,Bake Off 2 is the more interesting as two players take turns to guess the size of a hidden piece of cake. Along the top of the screen,the possible slice sezes are displayed. The players select the size by pressing the spacebar until the desired piece is highlighted, outside the limits are crossed and taken out of the game.

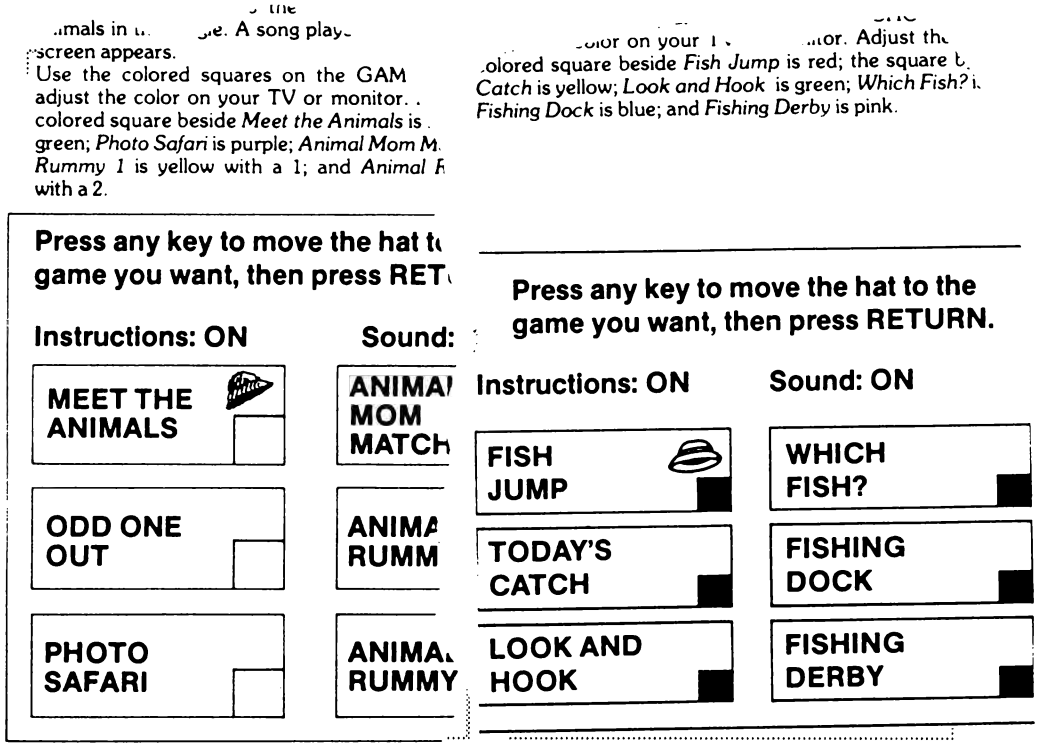
For very young kids this may be fine, but gaming six and seven year olds would find it more challenging if this was a function of human memory rather than computer display. Certainly the choice would have been good to have and would increase the usefulness of the program.

Fish Scales

The next disk, *Fish Scales*, teaches simple measurement using pretty well the same sorts of activities as *Comparison Kitchen.* Fish Jump is a graphic showing a fish leap out of the water to a height nominated by the child. This is one of the few activities which do not use the spacebar-return combination, but take numerical input.

While 'Today's Catch', 'Look and Hook'and 'Which Fish' use a measuring stick, 'Fishing Dock' is quite original. Here, the fisherman sitting on the wharf must determine which of two fish is closer to him. As the distances can only be judged by eye and as the fish are on opposite parts of the screen to one another, the activity can be absorbing.

Obvious distances are presented first so the child will gain some score, but progressing through the differences become harder to pick and I noticed one of the children with a ruler pressed against the monitor.



The final activity, 'Fishing Derby' is a game for two players. The object is to guess at which location, 1 to 9, a fish is hiding, by casting a line. As in 'Bake Off', clues are given as to whether the guess is too high or too low and numbers outside these limits are unusable. And again, my same comments apply.

Animal Photo Fun

Animal Photo Fun I left until last because i found it the most interesting and stimulating. 'Meet the Animals' is the first activity and this mixes a little reading with an introduction to 36 animals and their habitats. The extension exercises provided in the manual here are solid.

"* encourage the child to name each of the animals as it appears on the screen.
* help the child attend to the words that label each animal and habitat.
* ask the child to describe the distinctive features of each animal.
* talk about the characteristics of each habitat including climate, terrain and plant life."

In order to achieve some of these objectives, the graphics need to be good. In *Animal Photo Fun* they are very good. I have reproduced one of the activity sheet showing 18 of the animals and the habitat symbols to show the quality.

'Odd One Out' is the second game and here four photographs appear on the screen with one animal being from a different habitat from the other three. Choice is by spacebar/return, but should have been by typing the name. The reason I say this is that children who can pick catfish as the odd one out of sea horse, catfish, shark and whale (lives in a pond while the others live in the ocean) should be capable of writing the word. What about the odd one out of sheep, cow, fox and chicken? It can be not completely straightforward.

'Photo Safari' comes next, with animals being gradually exposed. Children identify the animal by habitat while racing against an on-screen timer (circle which progressively becomes smaller in area). When the time runs out the complete photographs with the name of the animal are shown to the children and the high score saved. Perhaps I will be accused of encouraging competition, but if the program is going to write a number to disk, why not a name as well?

'Animal Mom Match' - it's a pity it's not possible to change some aspects of these programs like the Americanisms - is a six card game of concentration. Babies have to be matched to their mothers in a set number of guesses. The child with the most "pairs" is the winner.

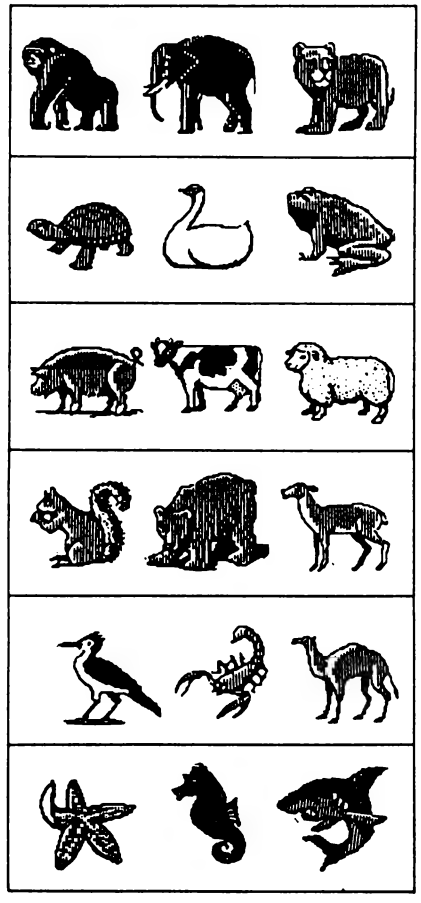
'Animal Rummy 1 and 2' were not as impressive, leaving too much to chance. In 'Rummy 1', the computer has a nasty habit of regularly winning. This makes any gaming strategy difficult to employ and can turn the children off very quickly.

Conclusion

Summing up,the packages are very well presented and have heaps of educational potential. The standard of graphics and animation is professional and they could equally well be used in the class or at home, though someone with some knowledge would be essential to have around.

Animal Photo Fun™

ANIMAL MATCH: Draw a line from the animals to their habitat.



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Apple

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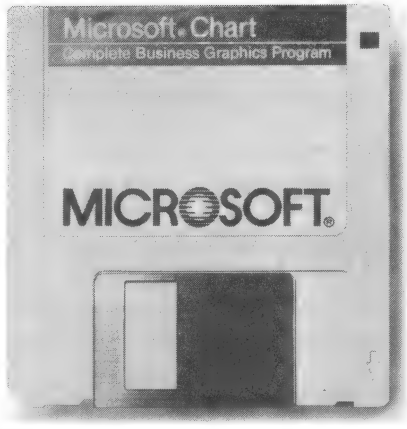
AP 183/ Palace/R

Lotus Jazz. Integrated word processing, business graphics, database management, data communications and worksheet.



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MacProject. Create complex "critical path" flow charts for production schedules, timelines and managing projects.

ThinkTank 512. An idea processor to organise projects, manage details, outline ideas and support decisions.

Microsoft Multiplan. Electronic spreadsheet for budget forecasting, business planning and "what if" analysis.

PageMaker by Aldus. Design newsletters, brochures, training manuals, presentations and more.

Jean-Louis Gassee - an urbane, literate Frenchman at Apple

The man behind the remarkable success story of Apple France was Jean-Louis Gassee who has since been elevated to Apple in Cupertino. This special report comes from WILLIAM SKYVINGTON who knows the man well and writes with an elegant pen.

THE APPOINTMENT of a Frenchman, Jean-Louis Gassee, as vice-president in charge of future Apple Computer products might appear just as surprising as the idea of bringing in a Californian, say, as chief wine taster in one of the great Bordeaux vineyards.

When you think of it, though, neither of these propositions is illogical: the French are no less versed in computing than the Californians in winemaking.

Jean-Louis Gassee, in any case, is an exceptional man. To point out that he has charisma and competence is like saying that vintage wine is good stuff to drink: an understatement that probably misses the point.

Marketing skills

It was Gassee's marketing skills, combined with his awareness of the profound sense of the personal computing revolution, that brought the Apple France subsidiary - that he himself founded in May, 1981 - to its position as No 1 foreign distributor in the Apple universe, an achievement for which his recent promotion to Cupertino might be thought of as a reward. But this is no simple holiday for Gassee, who admits that he has been placed in this key post "to create the conditions of future expansion, by helping Apple to get over the crisis".

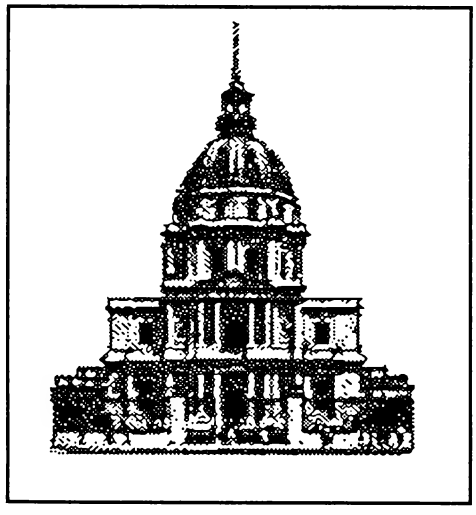
In Apple's short but spectacular history, there have been several pairs of complementary personalities . . . like the zero and the one bits at the basis of all computing. First, there were the famous "two Steves"- Jobs and Wozniak - who started the Apple rolling, in a California garage, less than 10 years ago.

Now, with the arrival of the dynamic Frenchman, and the definitive departure of Jobs and Wozniak, the Sculley and Gassee tandem is getting into action. Despite their different cultural backgrounds, will the two men be able to see eye to eye, and guide the company towards greater successes?

"John is a man with whom I am in confidence," confirms Gassee. "The best proof is that, whenever we are in disagreement, everything turns out very well: a conflict of ideas remains a conflict of ideas, and never turns into a personal clash between us."

First meeting

I first met up with Jean-Louis Gasse in Paris over 10 years ago, when he was the French director of Exxon's word processing company, then called Vydec. At that time, I was writing a guide book on Great Britain, for a French publisher, and Jean-Louis offered me the use of one of their machines, free of charge, to complete my typescript.



Once he had started up Apple France, Gassee made it a habit of providing personal computers to various journalists and intellectuals, many of whom ended up writing about their relationship with these new machines.

(I, for one, got around to publishing three books and numerous magazine articles concerning the machines that had found their way into my Paris studio - an Apple //e, a Macintosh and an Apple //c - thanks to Jean-Louis.)

It is certain that Apple France's policy of forming friendly relationships with writers and media people played an indirect role in the commercial successes of the company.

Now a writer

Meanwhile, Gassee himself has become a writer, for he has just produced - in French - a delightful autobiographical account of his encounter with personal computing, called *La Troisieme Pomme* (The Third Apple), published by Hachette.

The first famous Apple grew in Eden, the second one hit Newton on the head, while the third, of course, is the Cupertino fruit.

This brilliantly written book (which, I hope, will be translated one day into English) provides a faithful representation of the author's Gallic personality, intelligence and humour.

And it is packed with interesting fragments of information.

For example, we learn that the old-fashioned look of the Macintosh comes from the fact that its box was designed by a disciple of the Raymon Loewy school of the 1950's whereas

aesthetic appearance of the Apple //c (which came out three months after the Macintosh) is due to the imagination of Harmuth Esslinger, creator of the Porsche 928.

Explanations

The book also contains many helpful explanations and stories.

The anecdote that best symbolises the lovely mixture of seriousness and serendipity in Gassee's private universe is his description of an intimate nocturnal encounter, in the kitsch bridal suite of a Californian Hilton, in February, 1981, between the author and . . . the Visicalc program.

On the spreadsheets, Jean-Louis descovers a long-desired software creature: "I had dreamed of her, imagined her . . . and now she was there, in my bedroom." Soon after that evening, Apple France was born.

Jean-Louis Gasse has succeeded in creating, in France, an image of Apple Computer that is chic, youthful, intelligent, popular . . . almost sensual. And this atmosphere exists already at the level of the Apple France personnel, who are more like a happy community than a company.

Every member of his big Apple France family sits in front of a personal computer, Gassee likes to point out, not behind the machine. And they all have a second machine at home, to do what they like with.

In some of his marketing stunts in France, Gassee has gone well beyond conventional habits.

In a country in which comparative advertising is in fact prohibited, Gassee created shock publicity that started out with: "Don't tell my mother I'm working at Apple; she thinks I'm with IBM."

And he hired a sexy-voiced radio star named Chris Graffiti to record an answering-machine message, full of erotic innuendo, that is so amusing that lots of Parisians phone up Apple simply to listen in to their notorious reply. Apart from that, there have been some monumental shows organised by Apple in Paris, including a star-studded evening on the Champs-Elysees (which I attended with my 17-year-old daughter, who was one of the many people in the audience to be bowled over by the on-stage charm of Gassee) to announce the Macintosh in 1984, and the spectacular annual Apple Expo, alongside of which Sydney's recent MacWorld Expo looked like a suburban bridge evening.

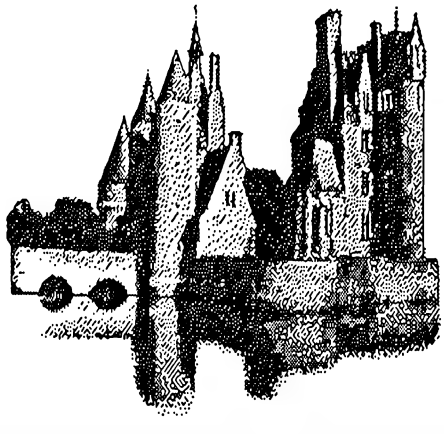
Jean-Louis Gassee appears to be enchanted by his new job at Apple headquarters.

Californians often asked him, at the beginning, in what part of their State he was going to settle down, and he would reply: "Somewhere between Cupertino and reality."

It is interesting, retrospectively, to learn that Stephen Jobs himself - "this personage from a novel, handsome and tragic, this visionary monster, this aesthete, solitary, detestable and fascinating" - actually offered Gassee his own job towards the end of 1984. But Jean-Louis is wise enough, today, to concede that good fortune is responsible, more than anything else, for the role that has been offered him in the restructuring of Apple Computer.

"There are seven stages in the life of a project," he states, cynically. "Ignorance, Indifference, Enthusiasm, Panic. The search for people to blame. Punishment of the innocent. Promotion of those (like himself) who didn't play any part . . ."

La Troisieme Pomme has been written by a man - a sort of sophisticated street poet - who, at the age of 41, combines the psychology and cultural heritage of a Parisian with the creativity and business sense of a Californian. He is harsh in his criticism of certain weaknesses in French business and politics, especially concerning the unavailability of venture capital, but he has an almost paternalistic pride in the new generation of French programmers who are providing us with such gems as *MouseCalc* on the Apple IIc (written by 23-year-old Luc Barthollet) and *Ensemble* on the Macintosh. He concludes that the challenge facing Apple, in the future, is to create "products that are both serious and exciting". Jean-Louis Gassee has always been convinced that most reasonable people find the Apple machines irresistible. He often points out rhetorically, for example, that "we no longer sell the Apple II; our customers simply buy it." And he takes pleasure in referring to prospective customers as "all those people walking around out there with our money in their pockets."



If ever anybody phones him up to complain that some little thing in his Apple computer is not working satisfactorily, Gassee always says to the person, in a mock-serious manner, "Bring the machine back, and I'll refund you your money immediately." Of course, nobody does. Gassee's winner mentality is reinforced by the fact that he has no personal anguish about the possibility of making mistakes. During the general euphoria of May 1968, in his office at Hewlett-Packard (before founding Apple France, he had been a French director both of this company and of Data General), Jean- Louis hung up a sign: "It is vital to make mistakes" Jean Louis - whose past "mistakes" have transported him into a warm Californian summer - has simple tastes.The only three things he has ever wanted in life, he tells us, are "to write books, to build computers and to have a home in Anjou, in that marvellous region where I am seduced by the rocks, the houses, the roses, the wines and the slightly decadent little castles that you visit of a Sunday." Steps No 1 and 2 of Gassee's lifetime projects seem to be bearing fruit. Books and computers: so many superb bottles of vintage wine. First, the rich apple-red variety of California; the mellow rose of Anjou will be for later on.

Getting your thoughts into order

A word driven relational data base for the Apple II? Certainly. Read on and learn about the new idea processing program for Troll which helps you get your thoughts in order.

THE ABILITY OF PROGRAMMERS to squeeze more and more performance out of the Apple II is nothing short of astounding. While programs for the Gee Whiz machines appear to depend on brute force and massive memory to work, new programs for the Apple II are elegant masterpieces of tightly written code producing an end result which is often unique, and frequently a neat blend of the evolutionary and the revolutionary.

Such a program is *The Word Machine* from Troll Microsoftware.

It is important that you understand this is not a word processor. Sure it will process words but there are a dozen programs that can handle the output of straight text far more easily.

Idea processor

The Word Machine is an idea processor. As ideas are expressed frequently in the English language it uses this as a base on which to build a structure in which complex and inter-related ideas can be stored, maniplulated and retrieved.

(It is, of course, eminently feasible to write ideas as mathematical equations or as chemical formulae or even to draw them. These methods of representing ideas exist and they require special purpose databases to store and rationalise them).

The Word Machine works on a heirachical system. Best way to think of it is with the main idea, the theme, the big picture, as the tree, subsidiary themes as main branches, developments of those themes as twigs and expansion and clarification of those themes as leavès.

Like all analogies this is something less exact - which is why analogies are inherently dangerous - but it does give a general basic idea from which to work. It falls down when you find the twigs on one branch are directly related to the twigs on another branch on the far side of the tree and the connection is a direct one - that is it does not go though a branch, through the tree, through a branch again and out to the relevant twig.

Instead it makes a direct connection through space.

Expanding a theme

The Word Machine lets you take a basic theme and then expand it through as many different layers as you need to develop the ideas to its full. This can very useful when you are working on a complex series of facts which are inter-related in a complex and intricate way.

The Word Machine handles each key word of the text as if it were a keyword in a relational database which means you can trace one word - one idea - right through the finished structure with the greatest of ease.

A WordMachine in a parlous state of repair after years of misuse and wear.

Windowing facility

To allow you to maximise your use of the program the authors have built in a multiple windowing facility so that on sub group can be formed and expanded and then compressed down into one line at the bottom of the screen ready to be expanded to its original size when the situation requires it.

This is not a program that does your thinking for you.

Far from it.

But what it does do is allow you to arrange a complex theme or an intricate series of ideas into some sort of ordered relationship and then, important this, display it on the screen so that other people can understand.

Printer or screen

The output of *The Word Machine* can also be sent to a printer but while an idea is developing and being adapted, altered, pruned, expanded it seems a folly to set it in the aspic of cold print.

Far better to remain flexible and operate from the screen until you are putting the ideas into action.

This is not a program for the thoughtless. On the other hand it is fairly easy to master and the demonstration disk - which comes with the master disk - is a great help in this regard.

The Word Machine is designed as an idea processor with a powerful display fuction.

It works at this task very well.

More information from Troll who are on 062 47 44 60.

APPLEMELT
- making Applesoft so soft

by Paul Szabo

If you have ever wondered how to produce neatly formatted output from an APPLESOFT program, or how to be able to type an expression, as opposed to a number, in response to an INPUT or similar statement, then this software is for you.

Using the & command, APPLEMELT (making APPLESOFT so soft...) adds some new commands to the APPLESOFT set, coexisting with and complementing the normal APPLESOFT commands.

APPLEMELT can be used on any version of the Apple II (II+, //e, //c), of any memory size; with an 80-column card on or off; you only need to have APPLESOFT in ROM. When loaded APPLEMELT uses only 1.25K ($500) bytes, the loader segment takes a further 1K ($400). APPLEMELT must be loaded at addresses 8192 ($2000) to 10495 ($28FF). The loader segment will relocate APPLEMELT to its final position just above HIMEM. APPLEMELT is also compatible with both the DOS 3.3 and ProDos operating systems.

It is possible to use APPLEMELT together with other routines using the & command, provided that these other routines do not assume control under the &: command. Upon loading APPLEMELT automatically daisy-chains itself with other routines already present.

To use APPLEMELT, type in the program (do a CALL-151, then at the * prompt do 2000: 20 58 FC AD D2 ...; to check your work do a 2000. 28FF to obtain a listing similar to ours, finally (ctrl-C) (RETURN) back to APPLESOFT), and save it with BSAVE APPLEMELT, A$2000, L$900. Or, alternatively, send a diskette together with a stamped, self-addressed envelope to the author: Paul Szabo, c/o School of Physics, University of NSW, PO Box 1, Kensington 2033, stating if you want your diskette DOS 3.3 or ProDos formatted.

For ProDos users:

Use -APPLEMELT or BLOAD APPLEMELT and CALL 8192 ($2000).

When APPLEMELT is loaded it lowers RSHIMEM ($BEFB) to protect itself against erasure.

If you plan to use APPLEMELT with APA, always load APA first, as it is NOT relocatable. Then lower RSHIMEM to $86, and load APPLEMELT. Note also that if you do an EXIT from APA, your APA commands will be lost as this command disconnects APA, but no memory will be gained until you reboot the system. - We recommend you use our version APA;. GOODLOADER, as this deals with RSHIMEM and also clears up some other problems with APA.

For DOS 3.3. users:

Use BRUN APPLEMELT or BLOAD APPLEMELT and CALL 8192 ($2000).

Do not ever use MAXFILES or HIMEM: as these commands would probably wipe out APPLEMELT.

If you plan to use APPLEMELT with C.R.A.E (EDIT.PROD) then always load EDIT.PROD first as it is not relocatable. But, as C.R.A.E. grabs control as soon as, it sees an & command, this would not allow you to load APPLEMELT> Use our version EDIT.PROD DOESN'T GRAB &: instead, which first checks for a : and returns control.

Syntax and command description

Notation is as in the APPLESOFT manual, in particular:
aexpr is an arithmetic and sexpr a string expression.
{ } encloses material which may be repeated.
[ ] encloses material which is optional.
! separates alternatives.

& PRINT [{ aexpr1sexpr1;!,!!!$charl#aexpr1,aexpr2}] Imm and Def

This command does a formatted print: word-wrap for strings and format specification for numbers. It should be used only for printing to the screen. When printing a string, all control characters will be replaced by spaces and if used on an APPLE][then also lowercase characters will be replaced by uppercase.

";" is a dummy separator between items. Using the "," separator will produce 3 blank spaces between items. Using "!" will force a carriage return to be issued, but there is no automatic carriage return at the end of the command/

The $ subcommand specifies the alignment of printed items, a setting being in force until re-specified. Valid $ subcommands are: $L for printing at the left edge (i.e. at the cursor), $C for centering in the space from the cursor to the margin, and $R for printing at the right margin.

The # subcommand specifies the format for printing numbers, a setting being in force until re-specified. aexpr1 is the width of field and aexpr2 the number of digits after the decimal point, rather like the F format in FORTRN (but here they are separated by a comma). The width of field is always (16. To specify exponential format, use aexpr1 = width+16. Allowed values are: aexpr1 < 32, aexpr2 <8.

& READ sexpr, aryname [,avar] Def only

Evaluates sexpr and searches it for valid numeric entries or expressions. Spaces (blanks) or commas act as separators between entries. Entries are stored successively in aryname

from aryname (0). Aryname must be a previously dimensioned, one-dimensional numeric array (type real or integer) of size < 255 (it will not be automatically dimensioned to 10 by this command). If present, avar will contain the number of entries detected.

This command was designed to be used mainly in the sequence 100 DIM X(10) : & INPUT A$: & READ A$,X,Y to provide the possibility of the user entering a variable amount of numeric information on the one line. If, as an example, the user had typed '10 2*Y LEN (A$)' and the current value of Y was 2, we would have got Y=3, X(0)=10, X(1)=4, X(2)=14, X(3) and up unchanged.

& INPUT [{ @sexpr1, l$sexpr2, l#aexpr, }] svar Def only

This command inputs a single string from the keyboard and stores it in svar. It has facilities to work in insert or overstrike modes.

@sexpr1 will cause the prompt=sexpr1 to be printed.

$sexpr2 specifies a standard answer=sexpr2, which can be accepted by a single press of (RETURN) or overwritten. The cursor will initially be set at the end of the standard answer.

#aexpr specifies the maximum number of characters the user is allowed to type; this must be less than 255.

User responses:

(ESC) voids and blanks the input line and returns to the program; this is the only way to produce svar="".

(ctrl-E toggles between the insert and overstrike modes.

(Del) for Apple //e, (ctrl-D) for APPLE][deletes the character in front of the cursor.

(left-arrow) and (right-arrow) move the cursor along the input line. (RETURN) accepts the entire input line, independently of where the cursor is situated. After the command the cursor will be at the end of the input line.(RETURN) will not be accepted if the input line is void.

All other characters are either stored in the input line or are ignored after a beep.

& GET [{ @sexpr1, l$sexpr2, l#aexpr, }] svar Def only

Analogous to & INPUT, but after processing it will blank the input line and leave the cursor just after the prompt.

& RUN {sexpr} Def only

Parses the string given by sexpr and executes it.

WARNING: This command was created originally to be used with arithmetic replacement statements only. Be careful not to use it for statements that affect the program flow control (GOTO, GOSUB...RETURN, FOR ...NEXT, DEF FN, etc.), for statements that use the input buffer (INPUT) or for any of the & commands. However, you may execute complete FOR ... NEXT loops with it.

Example:

```
10 A$="I=J+10" : I=0 : J=10
20 & RUN A$
```

will produce I=20

& CALL Imm and Def

Produces a nice bell tone.

& RESUME Imm and Def

Clears stack (deletes information about GOSUB's and FOR's) and executes the program in memory fromthe beginning. Roughly equivalent to the RUN statement, but will not clear the variables to zero. In particular, take care not to re-dimension arrays when & RESUME-ing your program.

This statement might be useful when resuming execution after an error.

& : Imm and Def

Prints "APPLEMELT". Used as a check that APPLEMELT is alive and well, and for APPLEMELT to spot an attempt to be loaded again. This command will be allowed to fall through to other routines using the & command.

Usage of zero page locations:

$EB, $EC, $ED are used permanently, and $FB - $FF are used occasionally, the values in these locations being destroyed by APPLEMELT.

```
2180- A2 52 86 ED A4 AF A5 B0
2188- C9 20 90 0C A0 01 A9 08
2190- 84 AF 85 B0 84 67 85 68
2198- 84 69 85 6A 84 6B 85 6C
21A0- 84 6D 85 6E A9 00 A8 91
21A8- AF C8 91 AF 60 00 00 00
21B0- 00 00 00 00 00 00 00 00
21B8- 00 00 00 00 00 00 00 00
21C0- AF 3A 00 00 00 00 00 00
21C8- 00 00 00 00 00 00 00 00
21D0- 20 4A FF A2 08 86 FD A5
21D8- 45 20 4F 27 A2 08 BD 00
21E0- 01 DD F1 28 D0 06 CA 10
21E8- F5 8E FF 21 4C 3F FF 00
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28F0- 8D D4 CC C5 CD C5 CC D0
28F8- D0 C1 00 00 00 00 00 00
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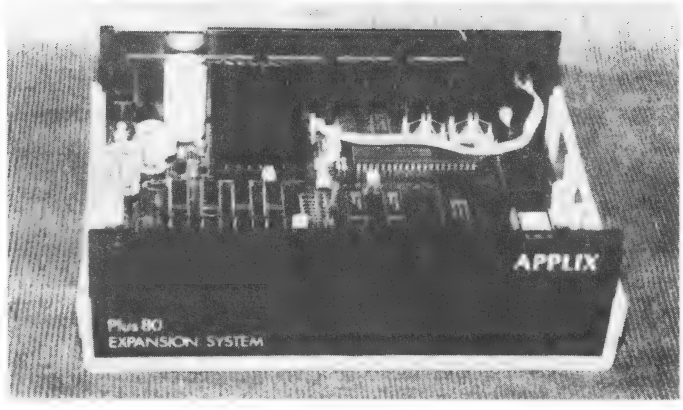

Comparison of Applix CP/M and Cirteck CP/M

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The Worm in the Apple

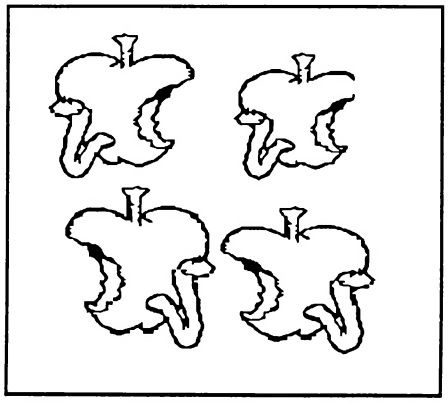
THIS ABJECT WORM has had very little education a point that hardly needs to be pointed out to long suffering but constant readers. Vet this worm knows, and knows full well, that you cannot rewrite history. There used to be a dreadful poem in my youth that had the somewhat less than memorable refrain - "The mill cannot grind with the water that is past."

You simply cannot go backwards and rearrange history to suit yourself. And yet that is exactly what Apple appear to be trying to do. They are trying, it seems to this jaundiced eye, to deny the existance of Steve Jobs and Wozniak.

This magazine has been sent a press release recounting the fact that the young and handsome Denis Bignold has been awarded the "Founder's Prize" for his superlative efforts in flogging Apples to eager Aussies. It is a prize that has been well earned. The press handout then goes on to tell us that the award is named after founder Mike Markulla. Now mo-one, certainly not this abject and miserable worm is going to suggest that Mike Markkula was not a major player in the Apple success story.

That would be daft. Just as daft as it would be to suggest he was the founder of the company. For those with short memories that was Wozniak and Jobs.

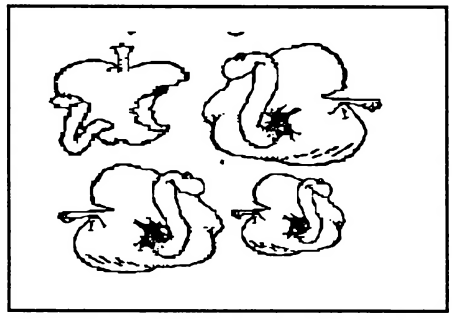
Rewriting history is for the Russians. Not for Apple. Please stop it now.



Far be it for this wretched worm to keep nagging away at the organisers of the big Mac attack fiasco held at the Centrepoint in Sydeny not a hundred years ago. It has already been savaged by the ediot and publisher of this magazine who refused to attend on principle - even incognito.

In truth, some exhibitors thought it well worthwhile. William Bullock and his escorting American fireman thought it was quite the article.

Another exhibitor quoted an epic line from *Chariots of Fire* at me and said he had attended better organised riots.



Diverging views, diverging opinions. This is what makes the world go round.

But one story I heard seemed to sum up some of the problems.

It appears that a major distributor was verbally asked whether he would like to exhibit some of his programs at the show.

He allowed this would not, in itself, be a bad thing. Then nothing happened. No follow-up letter. No further chats on the telephone telling him when, where or why. He presumed other arrangements had been made.

A few days before the show was to open he obtained a program and found, to his amazement, that he was slated to give two exhibitions of his products. Yet he had still had no word from the organizers.

Two days before the event he was telephoned by someone connected with the show who appeared to be in some small amount of agitation. Would he demonstrate his wares as it said in the program?

Not being a churlish sort of chap and realising that mistakes do happen he agreed to the request.

Would he also bring along forty copies of the program he was demonsrating so that everyone in the audience would have their own copies to practice on?

This he thought a bit string as forty used, second hand programs appeared to be stiffish price to pay for the privilege of giving a demonstration to a group of eager punters who had paid handsomely to attend the demonstration.

But, bearing in mind the intangibles of goodwill and possible future sales, he agreed to make the effort.

When he fronted up at Centrepoint he was approached by an employee of the organizers who presented him with an invoice which ran into four figures and represented what they were going to charge him for giving his talk.

I must get this point across plainly. They were not paying him to make the presentation. They were charging him a sum of over a thousand dollars for doing so.

You may consider this a little cheeky. Plainly the distributor did for he left the exhibition carrying his forty programs in a state that was described to me as high dudgeon.

The next day he was called up by the organizers again who said that he was programmed to give another talk and, on sober reflection, they had decided to waive the fee.

What this ignorant Worm wants to know is this. What happened to the people who bought gold tickets which, in theory, allowed them to attend every demonstration. Did they get a proportionate refund? Or were there, in fact, no gold card holders at all? Like everyone else, I think the idea of a Macintosh only show is excellent. It should be an annual event. And it should be widely supported. But I do hope by next year the organisers will have sat down and worked out exactly what they are trying to do and how they are trying to do it. A superb machine like the Macintosh deserves a superb show.

UNMITIGATED GALL

A Worm, because of his lowly position in life, sees things which are missed by human beings. A Worm sees antics and activities that would give you pause.

Take for example the strange case of the retrograde Apple Macintosh. This is a machine I love better than a good graveyard. But this love and affection does not blind me in any way to the charms and attractions of the Apple II, which was the constant companion of my youth. Both excellent and admirable machines.

Now two gentleman in the United States - who are not, I am assured of either Irish or Polish descent - have written a program for the Macintosh whose sole purpose in life is to make the Mac screen look like an Apple II screen and to turn all the standard Macintosh commands into Apple II commands.

Now understand clearly the intent of this program is not to allow you to run, say, Apple games. They will indeed run, but six times slower than on the normal Apple.

No, this program has been written for the same reason maniacs insist on climbing Everest.

Even more amazingly they are selling it for $120 a pop - and selling it quite successfully. I do not understand it. I simply do not understand it.

How much Random Access Memory can you load into an Apple IIe?

A good question and I am quite sure your answer will be wrong. This lowly and obsequious Worm has now had a play with a IIe with six megabytes - count them, six - which were all accessible from AppleWorks, a program of which this Worm is getting more and more fond.

And how was this miracle acheived?

My lips are sealed because the editor has threatened me with all sorts of mayhem if I reveal all before the next issue. But rest assured it was and can be done. And before you ask, no, you don't need a separate power supply and the heat build up is not unduly excessive.

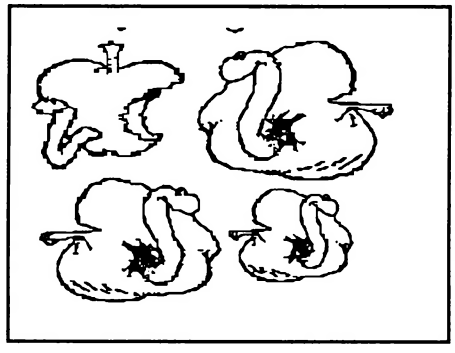
As a matter of sober fact you can go up another megabyte of RAM but then you can no longer use your disk drive or your printer which makes the exercise one taken to excess and self defeating. All will be revealed in the next issue.

This Worm feels a tremendous affinity for schoolchildren. Like worms they appear to be without rights and are downtrodden.

Which is perhaps why I am so fond of the Apple company because it has made such an effort to help schools and schoolchildren since day one.

No one at Apple uses that awful pejorative 'ankle biter' when referring to the younger and more intelligent section of our community although, in truth, I have heard the phrase used by the editor of this journal.

Last week I came across a database and international bulletin board which has been specifically and specially set up for schools. It is called Concept 2000 - one of those trendy names which are so in



vogue and cause this Worm such distress - and it contains an excellent database which is expanding by the minute - already it hasa definition of most of the words in thedictionary, both American and Australian - and it will soon be crammed full of other jolly things which will be of immense help when doing projects.

The name of the proprietary database they are using is "Status" and it is set up on an Apple II so that an eleven year old child can access the information with consumate ease.

What is so remarkable about that, I hear you cry? Read on.

The Sydney Morning Herald, an organisation with which the editor of this magazine is not unconnected, is putting all its clippings and information on to database. That database is, yes, Status. And the journalists have risen together in fear and wrath and stated that it is far too difficult for them to access. It is going, they say, to put a fearful strainon their brains.

I have suggested to the editor of this magazine that I will assemble a posse of 11 year olds who are using their Apples to access the same type of database several times a week.

For a small fee they are willing to set up a training class at the *'Sydney Morning Herald'* and teach the journalists how to do their job.

Strangely, the editor has not taken kindly to this suggestion and has wandered off, muttering into his beard.

Strange.

The "Emperor has no clothes" syndrome is alive and well in computers. No one seems to be willing to discuss the problems of the 3.5 inch disk in public. While this Worm, and other industry commentators of far greater intelligence and seniority, totally approve of the move to these smaller discs both for the Macintosh and the Apple II, the Worm is more than a little perturbed to find that the disk failure rate with these drives is reaching epidemic proportions - especially with disks from makers of whom you have very nearly heard.

Purely as a friendly warning this Worm points out that even the best known brands, such as Sony, are not as reliable as the old 5.25". And that this problem with disks increases with the amount of information you cram on.

In other words you should have no problems with the 5.25inch disks for the standard Apple II drive, you may have trouble with the standard Macintoshdrive if uou buy shonky discs. And you run the risk of severe problems with the800K drives for the Apple II unless you select your disks with the greatest of care. You have been warned.

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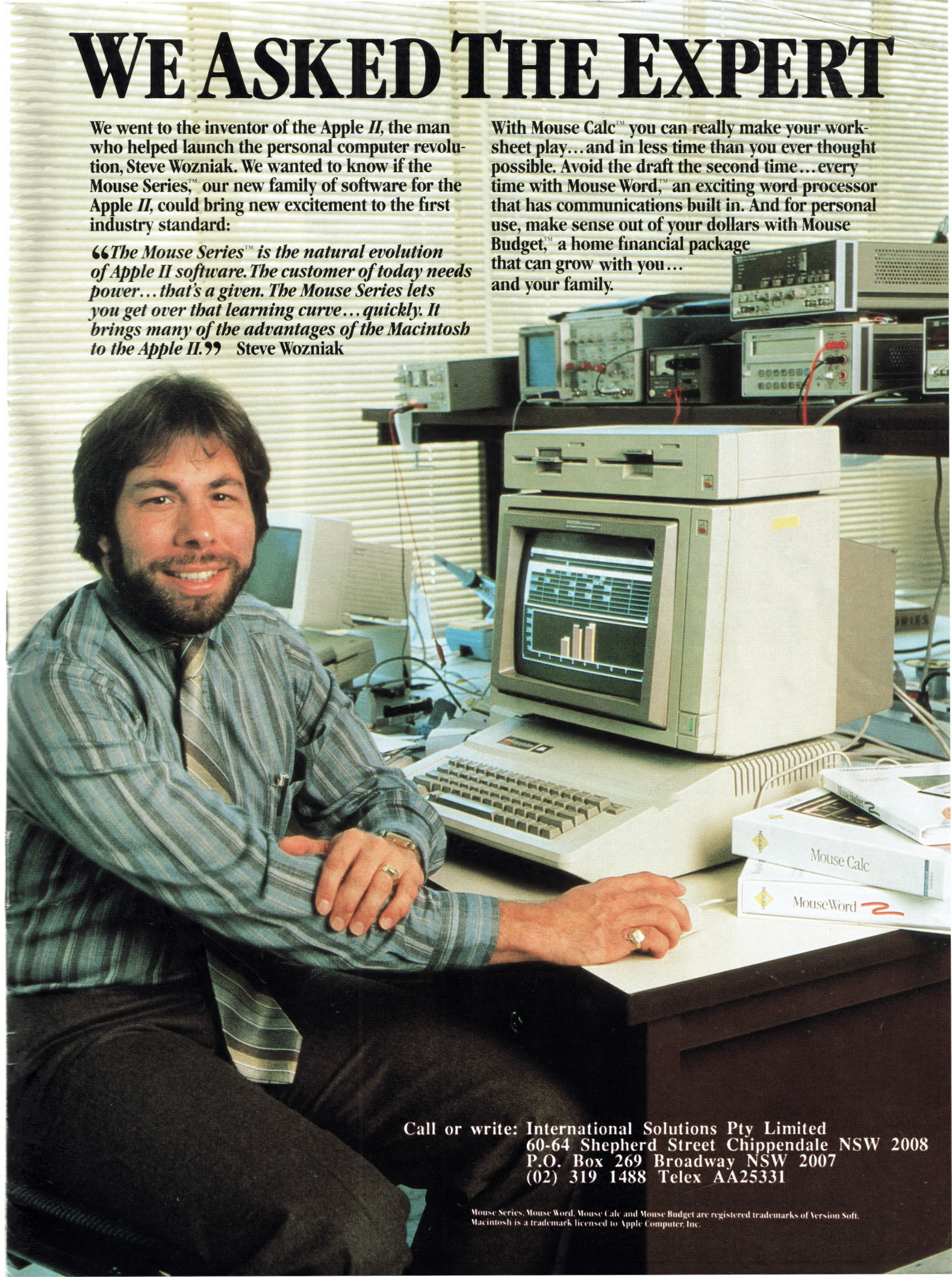

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